THE

FARMER'S GUIDE

IN

HIRING AND STOCKING FARMS.

CONTAINING

An Examination of many Subjects of great Importance both to the common Husbandman, in hiring a Farm; and to a Gentleman on taking the Whole or Part of his Estate into his own Hands.

PARTICULARLY,

The Signs whereby to judge of Land.
The Points to be attended to in hiring a Farm.
The Quantity of Land of every Sort proportioned to a given Sum of Money.
The most advantageous Method of disposing of any Sum from 50 *l.* to 20,000 l. in Husbandry on cultivated or uncultivated Soils.
The Means of rendering Agriculture as profitable to Gentlemen, as to common Farmers; and as beneficial a Profession as any other.
Hints to those Gentlemen who farm for Pleasure alone.

ALSO,

Plans of Farm-yards, and Sections of the necessary Buildings.

IN TWO VOLUMES.

By the AUTHOR of The FARMER's LETTERS.

VOL. I.

DUBLIN.

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INTRODUCTION.

I HAVE written this work for the uſe of two ſetts of men, *gentlemen farmers* and *common ones*. Not many of the latter read books, but ſuch of them as do not hold all in contempt, may find in theſe pages ſome hints, which if they do not *inſtruct*, may at leaſt *remind* them of points of importance, in the moſt critical moments of their lives——when they hire their farms. But with regard to gentlemen, I may venture to aſſert that ſome work of this kind is abſolutely neceſſary for their uſe, when they either take a part of their eſtates into their own hands, or hire farms of others. Not having ſo cloſe and immediate a ſpur as direct neceſſity to make them cautious and penetrating, they are more apt than the common farmer to overlook the want of ſome points of conſequence, and to be too much ſtruck with the appearance of others. Add to this, that many gentlemen who make farming a buſineſs or a pleaſure are at firſt *totally* ignorant of moſt things concerning it: Hence the neceſſity of being guided by their ſervants; a ſituation which *may* prove beneficial; but which I would adviſe none to truſt to: Can it be doubted that a work of this ſort will to them prove a better guide than fooliſh, prejudiced, or perhaps knaviſh aſſiſtants?

But previous to further remarks, it is ſomewhat requiſite that I ſhould inform my reader,

I do not pretend to inſtruct, or even refreſh his memory on points in which I am myſelf devoid of experience. I now live in the third farm that I have hired; the three almoſt as different from each other as poſſible, and ſituated in different counties: In ſearching for the two laſt I viewed and treated for, near I believe an hundred.——Thus I may in ſome meaſure aſſert theſe ſheets to be the tranſcript of experience.

There is no point of a farmer's life of ſo critical importance as that of hiring his farm. Courage and caution are then equally neceſſary to him, as to a general at the head of an army; if the firſt predominates, he is in danger of ſeeing imaginary advantages which do not exiſt in reality; and of overlooking a thouſand ſmall objections, ſeparately of trivial conſequence, but united, of material importance. If he is extremely cautious, he will aſſuredly view and reject many farms before he fixes himſelf, and in all probability ſome among them that are advantageous, and perhaps more ſo than that which he at laſt hires; not becauſe he approves it, but for want of time to examine more.

Farms are ſometimes to be had at a ſhort warning, when a man is allowed only the time ſufficient to view it, with others perhaps at his elbow ready to bid if he rejects; ſcarce any conſideration allowed: Such farms are frequently the moſt beneficial of all, as they muſt be let by a certain day, and conſequently the hirer, if he has quickneſs as well as prudence, may have advantages unknown in other caſes.

But

But in ſuch a ſituation how much is requiſite to make a good judgment ſpeedily! Common farmers almoſt always fail in ſuch critical moments. Their caution loſes them many an excellent bargain.

May not ſuch a book as this in ſuch a caſe be of great uſe? I have had my eye particularly to the farmers want of time to conſider; and thrown out many cautions and hints for their uſe at periods too ſhort for their own ideas to come fully into play.

To take one walk over a farm, which conſequently can be only at one ſeaſon——to diſcover at once the nature of the ſoil——to ſee into its evils, as well as advantages, by ſigns peculiar to every ſeaſon——to guard againſt the deceit occaſioned by ſeaſons favourable to particular ſoils——to compare the covenants expected in the leaſe, with the nature of the land —to obſerve the ſtate of the fences, borders, bogs, barren ſpots, &c. &c. that an eſtimate may at once be made of *extraordinary* labour——to minute the fields which muſt be particularly favoured to ameliorate them after an exhauſting tenant——to remark the ſtate of the roads——to gain information of tythe, taxes, poor, and a multiplicity of other circumſtances, which may be aſked as a man walks over the fields, and minuted in his pocket book as he goes——to calculate the repairs (if he is to do them) of the buildings, and to remark all the works the landlord muſt finiſh previous to ſigning the leaſe——

Laſtly, to calculate whether the ſum of money he is poſſeſſed of is ſufficient for the buſineſs.—— Theſe and a vaſt number of other points come at once upon him, to be canvaſſed by a judgment cool but clear and ſpirited.

A gentleman farmer has all theſe points, and many more to conſider. He ſhould at once be able to reduce to calculation the difference between himſelf and a common farmer in the ſum to be appropriated to ſtock a given number of acres——He ſhould, if abſolutely profit is his view, conſider on what ſoils he had better apply his money——to thoſe already improved or ſuch as yet remain uncultivated; in caſe he determines upon the latter, the whole range of buſineſs ought at once to be preſent with him; that he may proportion the land to his money.——In a word, he will, in any ſituation, require an uncommon attention either in himſelf or aſſiſtant.

The point of all others, both with the gentleman and common farmer, which I hold to be the moſt important, is the properly proportioning the farm to the ſum of money to be expended.

I have calculated a great number of eſtimates to ſhew the moſt beneficial manner of diſpoſing any ſum from 50*l.* to 20,000*l.* in agriculture; and this with a view for gentlemen to diſcover that farming may be made as profitable a buſineſs for the employing *large* ſums of money, as *manufactures* or *trade*.

The

The very ingenious Mr. Wallace here furniſhes me with an idea, which has great merit.

" It would be," ſays he, " of great advantage that rich men, inſtead of breeding all their children to ſome of the liberal profeſſions, or to the army, or merchandize, or ſome of the more genteel mechanic employments, would educate ſome of them for agriculture. Many things recommend ſuch a plan; could young gentlemen once be brought to a juſt taſte of life, and to reliſh ſo uſeful an employment*."

This excellent conduct never being practiſed, I attribute to the unſucceſsfulneſs of ſo many (in purſuit of profit) gentlemen farmers: Parents are fearful that their childrens fortunes ſhould be quickly ſquandered upon a buſineſs in which the methodical forms, ſo highly advantageous to trade, ſuch as a regular apprenticeſhip, and accounts, are totally overlooked. The few that have applied to agriculture for profit, having been quite devoid of all previous knowledge, have moſtly failed:——Had they *ſo* applied to law, phyſic, or trade, would it not have been the ſame?——Why is more to be expected of agriculture than of any other buſineſs in the known

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* *Diſſertation on the Numbers of Mankind*, p. 152.

known world? *viz.* That its profeſſors are inſtantaneouſly and by intuition to acquire a complete knowledge of it. Hence it is that no ridicule (and very juſtly) is more frequent in the country, than that upon unſucceſsful gentlemen farmers.

It was the hope of preventing ſuch ill ſucceſs in future, that partly animated me to the following undertaking: in which I flatter myſelf that I have proved huſbandry to be a moſt profitable employment, and for conſiderable ſums of money, when executed with knowledge, ſpirit, and prudence:——but I know not of any buſineſs wherein theſe are not requiſite.

Having thus ventured to premiſe theſe few circumſtances I ſhall now lay theſe ſheets before the reader, requeſting the favour of him not to condemn too haſtily thoſe principles which may at firſt appear contradictory to ſome eſtabliſhed notions, but which, on a little examination, may be found neither inconſiſtent with themſelves, nor incompatible with even common management. ———If I have proved the points which in my ſubject are of conſequence to be clearly known, I flatter myſelf I have employed my time ſomewhat to the benefit of the community. One thing I muſt be allowed to add, which is—— that I write merely from my own ideas:—— not one book ever yet publiſhed has furniſhed me with a ſingle page.

THE

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THE

THE

FARMER's GUIDE.

BOOK I.

Of hiring and ſtocking Farms, in cultivated Countries.

A VARIETY of materials, without ſomething of a regular arrangement, is liable to a confuſion that would perplex every reader; and the deſign of this work requires as much method as any, that thoſe, who ſhall think proper to conſult it, may not be obliged to turn over more pages than neceſſary. A point of no trifling importance to the common huſbandman. For the ſake, therefore, of clearneſs, I divide the ſubject into two principal parts.

I. The hiring and ſtocking farms, in cultivated ſoils:

II. The ſame, in uncultivated ones.

Under theſe heads I ſhall conſider, firſt, all thoſe circumſtances which are in common to both farmers and gentlemen; and, ſecondly, ſuch as are peculiar to the latter. The mention of theſe grand diviſions is ſufficient here to give the reader a general idea of the deſign; the ſubdiviſion will ariſe naturally out of the ſubject.

CHAP. I.

Of the Soil.

IN the common courſe of buſineſs, it is known ſome time before a farm is vacant; and thoſe who think of hiring it have more opportunities than one, of both viewing and enquiring after it. The great point is the ſoil. Let us, firſt, ſuppoſe it of a ſtiff nature, clay or ſtiff loam.... A judgment of this muſt be formed according to ſeaſons.

Enquiries are commonly, and judiciouſly, made into the crops the land has uſually yielded; but let me remark, that this point, although not abſolutely to be ſlighted, yet is never to determine a man's deciſion. Crops are found every where to depend on management, ſcarce ever on ſoil. A good farmer gains great crops wherever he goes; a bad farmer always poor ones. But as the rent is proportioned commonly to the ſoil, and as good huſbandry may be exerted on good as well as bad ones; it is requiſite to form an exact judgment of what every kind of ſoil is worth in rent.

And here let me remark, that, whenever I ſpeak of *rent*, I mean the amount of rent (commonly ſo called), lights, the poor, church, conſtable, ſurveyor's rates, repairs of buildings, covenants for works, &c. in a word, every article of annual expence, to which the farmer is liable from the occupation of his farm. If he conſiders the landlord's rent alone, he will, in numberleſs inſtances, be wretchedly deceived, and ſubject for ever to the worſt of miſtakes.

All ſtiff ſoils are viewed to moſt advantage in winter; the general fault of them is wetneſs, which

which is in the greateſt exceſs at that ſeaſon of the year. If the fields are level, and the water ſtands in the land, notwithſtanding the furrows are well ploughed and open, it is a certain ſign that the clay is very ſtiff, and of ſo adheſive a nature as to contain the water like a diſh: It is likewiſe probable, that draining of every kind will prove inſufficient to cure the natural evil of ſuch land. This kind of ſoil, likewiſe, ſhews itſelf in the breaking up of ſtubbles for a fallow; a very ſtrong draught of cattle is then neceſſary to work it. It breaks up in vaſt pieces, almoſt as hard as iron. When it is worked fine, it will run like mortar, with a heavy ſpring or ſummer ſhower. Theſe ſoils will yield very great crops of beans, and wheat, *&c.* They muſt, like others, be cultivated by ſome body; but I would adviſe every friend of mine to have nothing to do with them; never to be captivated with ſeeing large crops upon the land; for he does not ſee, at the ſame time, the expences at which they are raiſed.

I do not, in mentioning this ſoil, any more than the reſt, notice the weeds they produce: I have never found that ſign worth a groat. For the different management of farmers, the purchaſe of ſeed, the change of manures, *&c. &c.* all confound the natural connection between weeds and ſoil.

The next kind of ſtiff ſoil I ſhall mention is the mouldering, crumbling clay; which is, of all other ſoils, the beſt. If you obſerve a field of this land in winter, it will lie perfectly dry, if well ploughed and water-furrowed. — You may walk over a winter fallow, or wheat field of it, ſoon after rain, without adhering to your ſhoes, and may eaſily puſh it about, like garden moulds, with the foot. — It will bear ploughing much

earlier in ſpring, than any other ſtiff ſoil. If you view a ſtubble of it, you will find with a ſpade, that it will break up looſe and mellow. Any drains take full effect on this ſoil, and will, if ever ſo wet, lay it perfectly dry: At the ſame time, it does not run to mortar with ſudden rains. Whenever a farmer meets with ſuch a ſoil as this, it is of no conſequence to enquire what crops it has yielded, or any ſuch circumſtances: He may depend on its bearing plenty of corn, with good management. If it has been defective, it muſt infallibly be owing to a wrong method of culture. ——A flat ſituation is, to all ſtiff ſoils, unfavourable; a fall, or inclination ſome way or other, adds much to the value. Such a ſoil may exiſt unknown, for want of hollow draining; but then any little riſing place, that is dry, will, in all probability, prove an index to the reſt. Twenty ſhillings an acre for this land, when drained, is a much dearer rent than 5 *s.* for the other clay.

The next ſoil I ſhall mention is that of the ſtiff loam, which is neareſt allied to brick earth; this is in general an unkindly ſoil, without plenty of manure. It is known in winter, by being very adheſive upon walking over it; is not ſo retentive of water as the firſt-mentioned clay, being very eaſily drained; but is long in drying, even when little or no water is ſeen upon it: For which reaſon, it is generally late in the ſpring before it can be ploughed. When quite dry, it breaks up neither ſo hard and cloddy as the firſt clay, nor near ſo crumbly and mellow as the ſecond. If it is in ſtubble, it is apt to be covered with a minute green moſs. There are many varieties of this ſoil, but all agree in moſt of theſe circumſtances, and in being what the farmers call poor, cold, hungry land. When hollow ditched, and greatly

greatly manured, it yields any thing; but thoſe who hire it ſhould forget neither of theſe expences. It turns to the beſt profit laid down to graſs.

The gravelly ſoils are numerous in their kind, and very different in their natures. Warm, dry, ſound gravelly loams, are eaſily diſtinguiſhed in winter: They admit ploughing all winter through, except in very wet times; always break up quite in a crumbly ſtate of running mould; and if a ſtubble, will dig, on trial by the ſpade, in the ſame manner. If under turnips, you may perceive, by walking through them, that it will bear their being fed off. This ſoil will pay well for manuring, but will anſwer very well in a good courſe of management, without any.

The wet, cold, ſpringy gravel is a very bad ſoil; it is known, in winter, by the wetneſs of it; and in ſpring, by its binding with haſty ſhowers: It never breaks up in a crumbly ſtate, nor ſhews a mellowneſs under the ſpade. Hollow drains greatly correct its ill qualities, but it requires a prodigious quantity of manure to fertilize it.

Some gravels are ſo ſharp and burning, that they produce nothing except in wet ſummers; but ſuch are known at any ſeaſon of the year.

Sands are as various as gravels, and are all eaſily diſcoverable in their natures: The rich black ſand is, I believe, as profitable a ſoil as any in the world: It has, at all ſeaſons, a dry ſoundneſs, and at the ſame time a moiſture without wetneſs, which ſecures crops even in dry ſummers. The ſpade is ſufficient to try it, at any ſeaſon of the year.

The light ſandy loam is, likewiſe, an admirable ſoil; it will bear ploughing, like the preceding, all winter long, and appears quite ſound and

mellow when tried with the ſpade If it lies under a winter fallow, the beſt way to judge of its richneſs, is to remark the ſize of the furrows, and the degree of adheſion in the ſoil. In clay ſoils, the great excellency is the reſembling ſand in many circumſtances; and in the ſandy ones, the ſimilarity of clay. Thus ſtiff land, being dry and crumbly, is a great perfection; and light land, being ſtiff and adheſive, is an equally good ſign.

When therefore the farmer views a light ſandy loam, whoſe ſound dryneſs is acknowledged, he may preſume the ſoil is *rich*, in proportion to its ſtiffneſs: If it falls flat in powder, and has no adheſion, it is much to be ſuſpected that it is a *mere ſand*. A dry ſound land, that is pretty ſtiff, is always good. —— However, ſuch land being ſeldom without a crop of turneps, the ſize of them (if they are not manured, which is very eaſily ſeen) will ſhew, in many caſes, the richneſs of the land.

The mere ſandy ſoil, that has ſcarce any adheſion, is alſo eaſily known: Upon this land it is of importance to view the crop, or crops. Dryneſs being the great characteriſtic of that ſoil, a wet ſeaſon ever proves the beſt of all manures; ſo if a poor crop is found upon ſuch land, in a wet year, there is a ſtrong preſumption that the ſoil is nought, at leaſt, in its preſent ſtate: And if the tenant is to be at the expence of marling, chalking, clay, or any other extraordinary manuring, the expence muſt be conſidered in the rent.

A general rule with all ſandy ſoils is, that, if dry, the ſtiffeſt is the beſt: except the black moiſt ſand, which exceeds them all.

The white chalky ſoil is, in general, of a cold, wet, ſpewy (as the farmers term it) nature; will not

not bear ploughing in winter, unleſs the weather is very dry or froſty; runs exceſſively to mortar with a heavy ſhower, when in a pulveriſed ſtate. It is a cold hungry ſoil, of little profit, except with very peculiar management; and anſwers beſt if tolerably dry laid down to ſainfoine.

The moory ſoils, in a ſtate of cultivation, are too inconſiderable to mention particularly.

I am ſenſible there are a multitude of other ſorts of land ſeemingly diſtinct from theſe, which are here unnoticed; but it ſhould be remembered that the ſeveral kinds of land, like the ſhades of colours, blend into each other, till all diſtinction is loſt. Thus many ſoils are found partaking of both clay and loam, in ſo equal a manner, that it is difficult to aſſign it to either. We ſee the ſame thing between gravel and loam, chalk and clay, *&c. &c.* and beſides theſe confuſions of diſtinction, each ſort of ſoil varies infinitely, and every quality in each ſoil the ſame. An attempt to characteriſe each variation, as well as each ſoil, would be an endleſs, and an impracticable work: I have, therefore, purpoſely paſſed by ſeveral variations of which I have even had particular experience, and ſtuck to the diſtinguiſhing marks alone. It muſt undoubtedly be left to the perſon who views a field, to determine which particular ſoil it is neareſt allied to; and what qualities, good or bad, are moſt to be diſcovered in it.

In reſpect to graſs lands, the marks for judgment are different. Theſe are beſt examined by attending, firſt, to the circumſtances in which they are moſt deficient; and then to ſuch as are in their favour. The more ſeaſons graſs fields are viewed in, the better; though any one is ſufficient for a tolerable judgment.

One evil attending theſe lands is, that of being too wet; the ſigns of which can never be miſtaken, or overlooked, in any ſeaſon of the year. In winter, it is at once perceived by walking on it; at all times of the year, by the herbage which generally abounds on it, ſuch as ruſhes, flags, and a great quantity of moſs; and alſo by the colour of the graſs, which is moſtly blue at the points; ſometimes of a dirty yellow hue, and always coarſe. If the ſoil is the firſt deſcribed ſtiff clay, and the ſurface level, the evil will be very difficult of cure, if of the other ſort, of clay or ſtiff loams, draining will have great effects. To diſcover the ſoil, the ditches ſhould be examined; and if tried here and there with a ſpade, it will be the better.

Another evil, to which graſs fields on theſe ſoils are liable, is that of being hide bound and moſſy, without an exceſs of wet; this is very perceptible in winter, and when fed. If a tenant is not allowed to plough ſuch, they will require a great expence in manure.

Graſs fields on gravelly ſoils are, if the gravel is ſharp, very apt to burn (as the farmers call it) in dry ſummers; it is a fault, in ſuch years, but they give great and ſweet crops, in wet ones, provided it is a gravelly loam. An *abſolute* gravel ſhould never be under graſs. A farmer ſhould not, however, regret having a paſture or two of this ſort in his farm, being of excellent uſe in winter, for feeding ſheep and lambs on with turneps, *&c.*

The low meadows, whatever the ſoil, on the banks of rivers and brooks, are in general very good, but often ſubject to the terrible misfortune of being overflown in ſummer; which not only ruins crops of hay before they are cut, but carries them away perhaps when juſt made. This

is

is a miſchief which leſſens the value of ſuch lands greatly, and ſhould always be enquired into. Winter floods, if not too frequent, are beneficial.

Some farms have the reputation of always rotting ſheep, if they are ſituated very low, and have much wet graſs land. The report may be very juſt; but, I believe, it will generally be found that this quality is but an attendant of others already noted; and that the cure of common wetneſs, by thorough draining, will, at the ſame time remedy this evil.

Many graſs fields, on all ſoils, conſiſt of ſo bad an herbage as to be of little value. — Made up of all ſorts of weed trumpery, and the worſt and coarſeſt of graſſes, if a landlord will not allow ſuch to be ploughed, the farmer ſhould minute the rent accordingly. This fault is viſible at all ſeaſons.

As to a general poverty of ſoil, of whatever ſort, owing to bad management, ſuch as perpetual mowing — no manuring — or a general inattention; the degree of ſuch a ſtate will always be evident, whether viewed in winter, ſpring, or ſummer, under hay or fed; but the favourableneſs, or unfavourableneſs of the ſeaſon, ſhould not be forgot in ſuch a view.

The *viſible* excellencies of graſs lands are recited in a few words. A good crop of graſs in a wet ſummer is not to be relied on, but if it happens to be a dry one, the ſign is by no means to be rejected.

The goodneſs of the herbage is to be ſeen at all ſeaſons, even in winter.

Lying dry and ſound, holding a good verdure, and blotched with patches of yet deeper green; theſe are, in winter, undeceiving proofs of excellent paſture. If ſituated on a hill, or any ſpot that

that gives ſuſpicion of burning, try it with a ſpade.

A river that does not overflow, running through a farm, is a very favourable circumſtance, as it indicates a great probability of all the graſs fields being well watered; that is, for cattle. Paſtures, that have neither a river nor ponds in them, are of little worth; the inconveniencies of truſting cattle in ſuch, are too great to be ſuffered.

There are, in many farms, very refuſe waſte paſtures, never mown; over-run with mole and ant hills, buſhes, brambles, *&c.* for which very little rent is demanded. Such are by no means to be ranked in the tenant's chapter of evils; for no farm would be more profitable than one conſiſting wholly of ſuch. The hills cut up, and mixed with a little lime dung, aſhes, chalk, or marle, make an admirable compoſt. The buſhes and brambles are eaſily grubbed up, and will pay for the work. Then the fields ſhould be examined. If a light gravelly or ſandy ſoil, they will pay very well under the plough; and if a clay or loam, manure them well, which will diſcover what the herbage is. If good, leave them in graſs; if bad, convert them into tillage for a few years, under an engagement (if required) to lay them well down again. Such old and forſaken graſs fields are to be reckoned among the moſt profitable paſtures. But the rent ſhould not be above 10*s.* an acre.

CHAP.

CHAP. II.

Of the Contiguity of the Fields.

COMMON farmers too often overlook this circumſtance. If they attended to it as much as their profit required, we ſhould ſee landlords reforming their eſtates, in this particular, more than at preſent is the caſe. There is not a more expenſive, perplexing circumſtance in any farm, than the fields being in a ſtraggling, disjointed ſituation. The diſadvantages are numerous and ſtriking.

I. The farmer's buſineſs is in no reſpects under his eye. He muſt take a walk, and perhaps a ride, through other mens grounds, to diſcover or view any circumſtance of which he wants to be acquainted. If fields in ſuch a ſituation are no further diſtant than many of his contiguous ones, yet will they not be ſo often viewed: A walk at home examines ſomething, from the moment a man leaves his houſe; but when he has to croſs land indifferent to him, his disjointed fields will not have an equal ſhare of his attention; and every one knows the proverb of the *Maſter's eye*, &c.

II. All the operations of ploughing, harrowing, rolling, *&c. &c.* are performed with an encreaſe of expence; the going and coming waſtes time by degrees, and, in the period of a long leaſe, amounts to a ſum that would ſurprize one who never thought of the matter. Add to this, ſuch fields cannot be manured but at an expence of double the reſt of the farm, conſequently they will never have any advantage of that ſort. They could never have any amendment at all, unleſs they lay upon a bed of marle, chalk, or clay, which

which the farmer had ſpirit enough to dig for, or folded with ſheep. — But then it is natural for a man to like to have ſuch improvements, where he can enjoy the view without a walk or ride through other mens grounds: Beſides, there are thouſands of fields of this ſort where no ſuch manure is to be had.

III. Another conſequence of disjointed fields, is the having an extraordinary quantity of fencing to keep in repair; a circumſtance very troubleſome and expenſive.

IV. Such fields are, in general, much more expoſed to depredations from neighbours cattle, &c. &c. &c. than others that are contiguous to the home ones. In thoſe, through which the maſter or ſome of his people are conſtantly paſſing and repaſſing, accidents, it is true, may happen, but then they are preſently diſcovered and remedied. A gate left open, by careleſs people, or broke in pieces by fox-hunters, very often does a farmer great miſchief at home; how much more pernicious muſt it prove at a diſtance, and where himſelf, or ſervants come but ſeldom?

For theſe and many other reaſons, I would never adviſe a man to hire a farm that was not contiguous at leaſt. It is a circumſtance very greatly in favour of a farm that it is circular, or at leaſt perfectly compact, with no other man's grounds jetting into it. Numerous advantages attend ſuch a diſpoſition of fields. One very important is, the fencing ſo many of your fields yourſelf, and leaving the ſhorter line of outward fence againſt other farms. In a compact farm, a man never (except in the ring-fence) hedges and ditches only one field at a time; he neceſſarily does two at once. — But theſe advantages are too apparent, at the firſt mention, to need elucidating.

If

If the fields of a farm are in this contiguous and compact ſituation, a man ſhould alue it in the rent he eſtimates the land at: The circumſtance is as much worth an annual payment, as any acre in any farm. Six pence, or nine-pence an acre (in rich countries), ſuch advantages muſt be cheap at. This I know, I would give a ſhilling, or eighteen-pence an acre more for a compact farm, than for a disjointed one of the very ſame nominal value; and this without ſuppoſing the evil ſo great as it is found in many farms. Some lands are ſo little contiguous as not to be *worth*, of any man's money, half a crown an acre; which, compact, would be cheap at twelve ſhillings.

CHAP.

CHAP. III.

Of the probability of increaſing the quantity of Land.

THE great object of farmers, whether gentlemen or common huſbandmen, (if they make it their buſineſs and profeſſion) is to advance their fortunes. Merchants and Manufacturers, when they increaſe in riches, enlarge their trade; and farmers, in the ſame manner, are deſirous of a more conſiderable buſineſs, as ſoon as they poſſeſs a ſum of money beyond the amount of what is requiſite for their preſent farms.

The moſt common fault a man ſhould guard againſt, in this caſe, is the wrong application of his profit. Unleſs his farm is perfectly improved and cultivated, he may ever depend on it almoſt as a maxim, that it is more profitable completely to cultivate one farm, before he attempts another.

Fields, of which he has experience, has obſerved, and felt their defects, in which he has perhaps tried the effect of draining or manures, are much more likely to repay him for an additional expence, than others of which he has had no experience; not becauſe the ſoil of one is more improveable than that of the other, but by reaſon of the greater ſkill with which he will infallibly work upon the firſt. Add to this, that one hundred acres, well cultivated, will pay more *clear* profit than two hundred indifferently cultivated.

For theſe reaſons, I venture to adviſe all farmers, when they have a ſum of money ready to expend, always to view their farms before they think of additions; and conſider what improve-

ments,

ments, either in draining, manuring with marle, chalk, clay, lime, town manures, &c. &c. &c. can be made on their lands; and, if any are to be found that require all or near all his money, to expend it in ſuch improvements, before he thinks of adding to his farm.

All ſuch improvements, let me add, are a much better and more ſure method of diſpoſing money *at intereſt*, than any others that can be found.

But if, contrary to this ſtate of the caſe, his farm is all under a complete culture, and a ſum of money yet in his hand ſufficient for making an addition to his buſineſs; hiring a freſh parcel of land then becomes abſolutely requiſite, or a removal to a larger farm. Now, of theſe circumſtances, the *addition* in general is moſt profitable, ten to one. I ſuppoſe his old farm in perfect order; ſuch an one cannot be left without great loſs; in ſpite of all eſtimates, by which a new tenant may pay the old one for improvements, the latter will infallibly be the loſer. Further, he will probably have his work to do over again in his new farm, and, it may be, not with ſo good a proſpect of profit as before. Add to this the loſs of moving, which, in ſome caſes, may be conſiderable; and, upon the whole, it will be found much more beneficial to make an addition to an old farm, than to move into a new one.

For theſe reaſons, it is a point of much importance, when a man hires a farm, to know that there is a probability of having additions made to it, in caſe he grows rich enough to want them. This probability depends on many circumſtances, which there is no neceſſity to overlook

A farm may be one among many contiguous belonging to one landlord; in which caſe there is a better chance for an addition, than if it was the whole eſtate of the landlord, or all he poſ-

ſeſſed

ſeſſed in that neighbourhood. Since, if a neighbour's farm is vacant, no one can afford to give ſo good a rent as a farmer contiguous to it; and, conſequently, he has a better chance for it, than one whoſe land is at a diſtance.

A farm may join up, or even be almoſt encloſed, by one infinitely larger than itſelf, and too large for the occupier of the firſt to think of hiring. In this caſe, the ſmall farm is in a much greater probability to be thrown to the great one, than the great one to be annexed to the ſmaller. Conſequently this ſituation is, in the reſpect we are now conſidering, a very unfavourable one.

For the ſame reaſon, it is very advantageous to hire a farm that joins upon many others not larger than itſelf, but rather ſmaller. In this caſe there is an evident probability of acquiring an addition, and no danger of being converted into an addition one's ſelf.

Sometimes farms are to be had of no determinate quantity of land; but as much or as little as a man chuſes to hire. Such are very favourable opportunities, and particularly valuable. It then depends on the farmer alone to take juſt the breadth of land which may be advantageouſly ſtocked, and conducted with the ſum of money he is poſſeſſed of; by which means his fortune is thrown into the moſt advantageous road that is poſſible: but then he ought to be *eſpecially* upon his guard, not to take more than he can thoroughly command. A farmer ſhould ever be ſtronger than his farm. I ſhall, in theſe ſheets, draw up ſome calculations of the proportion between a given ſum of money and quantity of land.

All theſe circumſtances, whether they exiſt in a greater or leſs degree, ought to be reduced to ſome eſtimate by the farmer, when he views the farm. If every point is not conſidered, a juſt idea cannot be gained of any.

CHAP.

CHAP. IV.

Of the compariſon between the covenants of the leaſe, and the nature of the farm.

MANY landlords are very tenacious of the covenants which they have uſually inſerted in their leaſes; ſo that a man when he approves a farm, and agrees to the rent, may find the conditions of tenure propoſed to him, ſuch as are incompatible with his intereſt, his deſigns, and even with good huſbandry.

The merit or reaſonableneſs of covenants muſt be conſidered always, on compariſon with the nature of the farm: It is for want of this conſideration that unreaſonable covenants are ever propoſed. Many landlords make it a rule to have all their leaſes alike; ſo that the tenants, who farm ſandy ſoils, are tied to the ſame conditions, as thoſe who occupy clay ones;—than which nothing can be more abſurd. The beſt way of treating this point will be to ſpecify ſeveral common covenants, and remark the farms for which they are reaſonable and proper.

I. *The tenant not to break up any graſs land.*

This covenant is reaſonable when all the meadows and paſtures of a farm are in perfection, the herbage of the right ſort, and free from noxious weeds, moſs, &c. &c. It would be abſurd to break up ſuch graſs, except in one inſtance; the arable fields might, by a ſtrange jumble of ill management, be all upon the clay part of a farm, and the graſs ones all upon the gravelly or ſandy part; in which caſe, there can be no doubt but the whole ought to be reverſed.

But the graſs fields, in many farms, ſo far from being in a ſtate of perfection, are in the

very contrary ſtate; over-run with mole and ant hills, buſhes, brambles, and rubbiſh of all kinds; inſomuch that the nature of the herbage, whether graſs or weeds, is a perfect ſecret. If the field is well managed, cleared, grubbed, levelled and manured, the ſurface may poſſibly appear covered with rubbiſh as noxious as before, though of a different ſort; but yet the farmer muſt not plough it; ſuch a covenant is abſurd and intolerable.

Some farmers, and even landlords, lay down fields for continued paſtures with a large portion of ray-graſs, among other ſorts: A new tenant will find ſuch paſtures ſacred from the plough; that is, he will have fields under what is called graſs, that will, in a few years, be not worth a groat an acre;—ſtill he is not to plough them up. Do ſuch covenants require any comment?

Many ſoils yield exceeding fine crops of graſs, for ſeven, eight, or ten years, and then decline, notwithſtanding the beſt management: ſuch ſhould be kept alternately under graſs and ploughing. In graſs for ten years, then arable for four or five, and laid down again. But none of this beneficial huſbandry can be practiſed, when a landlord will not allow any graſs to be ploughed up.

For theſe and many other reaſons, a tenant ſhould be upon his guard, when he hires a farm under this covenant, that he does not prejudice himſelf in ſo material a point. And as a means of not being cramped with ſuch a covenant, if he ſees land that either does or will want to be broke up, he ſhould offer to engage to lay down an equal quantity of land, *to his landlord's approbation, before* any is ploughed up; a covenant ſo very fair, that no reaſonable landlord can or will refuſe his aſſent.

II. *The*

II. *The tenant not to ſecond, third, or fourth crop the arable lands.*

A covenant to one of theſe purpoſes is almoſt univerſal in every county in England; and yet I will venture to aſſert, that were they ſtrictly adhered to, it would ruin the beſt huſbandry of half the kingdom. A few remarks will prove this.

To ſummer fallow light ſandy loams, ſands, gravels, or any ſoil light and dry enough for turnips, is an antiquated cuſtom, and by no means founded on modern *real* improvements. The moſt advantageous, of common courſes, for ſuch ſoils is,

1. Turnips.
2. Barley.
3. Clover.
4. Wheat.

Now if two fallows are ſubſtituted inſtead of the turnips and the clover, the farmer will get no better crops of barley and wheat (probably not ſo good) nor will the land be left in a better ſtate. This fact holds true with all ſoils dry enough for turnips.

I would by all means adviſe a farmer (if he deſigns to obſerve his leaſe) never to leave any of theſe lands under ſo abſurd and unprofitable a covenant. Let me, however, remark, that this is only applicable to farmers who are enlightened enough to hoe their turnips thoroughly: As to the villainous ſlovens who do not hoe, no matter what reſtrictions they lie under.

Upon dry, ſound, rich clays, as great crops of wheat are gained after beans in drills, well and completely hoed (the common practice in ſome parts of Kent), as after a fallow: upon ſuch ſoils, therefore, it is highly requiſite that a farmer have the privilege of practiſing ſo excellent a mode of huſbandry:—but, again, let it be under the pro-

viſo of thorough and complete hoeing; three times, at leaſt.

Many landlords not only conſider turnips (hoed) as a crop on all ſoils, but alſo clover: I have ſeen many leaſes of farms on ſtrong clay ſoils that forbid the tenants ſowing clover, unleſs it was ploughed up by the firſt, or middle of June. Such a covenant is a great prejudice to a tenant, ſince no courſe is more profitable for ſuch land, than

1. Beans.
2. Barley.
3. Clover.
4. Wheat.

Another covenant too common is to ordain that clover ſhall only be fed: Whereas I know by experiment, among many other farmers, that better wheat ſucceeds clover twice mown for hay, than fed the whole year.

Peaſe, tares, buckwheat, and other crops have alſo the quality of preparing admirably for corn; but theſe crops are more apt to fail than beans, clover and turnips; conſequently it cannot properly be decided whether they ſhould be followed by corn or not, until it is ſeen whether they fail or not. So that this ſhould be in the farmer's breaſt; but if the leaſe allows him not to conſider ſuch crops as a fallow, he will ſcarcely ſow them to take the chance.

And here it will not be impertinent to add a word or two to landlords on this ſubject. If they would allow turnips, beans, clover, peaſe, &c. &c. &c. to be fallows, and at the ſame time abſolutely interdict wheat, rye, barley, or oats being ſown on each other, without the intervention of one of the above fallow-crops, I am confident they would as ſecurely prevent their tenants from damaging their farms, as they at preſent do by directing only two or three crops to a ſummer fallow. For if the fallow is ſuch an one as too common,

common, *viz.* two or three ſlovenly ploughings, and then two crops of corn, the land will ſuffer infinitely more than if cropped oftener, in the manner I have mentioned; and the chance of being damaged with bad tenants is as great, under the common covenants, as under ſuch as I venture to propoſe.

In a word, a farmer, when he bargains for a tract of land, ſhould conſider well the covenants of this ſort he is expected to obſerve; for, if his landlord will not allow turnips, clover, &c. &c. to be reckoned a fallow, he muſt make large deductions from the rent he fixes in his own mind as the value of the land. If he thinks a farm worth 12 *s.* an acre, with a reaſonable liberty of cropping, and he afterwards finds himſelf required to obſerve the old covenants, the value is ſunk 2 *s.* 6 *d.* and in many caſes 3 *s.* 4 *s.* and even 5 *s.* an acre. He had better farm ſome lands with a requiſite liberty in cropping, at 15 *s.* an acre, than at 7 *s.* 6 *d.* without ſuch liberty. The following covenants, reſpecting this article, no farmer need to fear. Wheat, rye, barley, and oats never to be ſown after each other, or themſelves. Clover, fed or mown, a fallow on all ſoils, provided it is on clay ſoils, ſown with ſpring corn that ſucceeded a fallow, or a crop of beans. Turnips, hoed twice, and if requiſite three times, to be conſidered on dry ſoils as a fallow.

Beans, peaſe, potatoes, &c. ſown in drills, and ſome thoroughly hoed three times; a fallow: A *great* crop of peaſe in the broad caſt way; the ſame with permiſſion.

Such covenants are much more advantageous to landlords, as well as tenants, than allowing barley or oats to ſucceed wheat.

III. *Tenants not to dig up any graſs borders of fields.*

This is a very common covenant in many parts of *England*, and a more ridiculous one cannot well find its way into a leaſe. It is chiefly to be met with in rich countries, that is, preciſely in thoſe where it is the moſt pernicious. In all wet ſoils, or ſuch as are inclined to moiſture, the borders of fields ſhould be twelve inches at leaſt lower than the fields themſelves, for the general purpoſe of draining the ſurface, and likewiſe to ſave the expence of uſeleſs water furrows. Where borders are higher than the field, deep water furrows muſt always be kept open, parallel with them.

So far from not digging them up, they ought to be conſtantly kept down by digging them frequently. for the turning of the ploughing increaſes the headland ſo much, that a riſing is found in a few years, which ſhould always be dug up and carted on to the land; and the whole border left ſo low, that the water may run out of every furrow acroſs it into the ditch. In ſome parts of *Eſſex*, particularly between *Braintree* and *Thaxſtead* and *Hockeril*, they dig away their borders in this manner, and find great advantages in the practice: If you view a farm in that country that has been in the hands of a ſloven, you will be ſhewn the high *graſs* borders, as an advantage to the new tenant in the manuring way.

I have mentioned this covenant not as one of capital importance, but to remind the farmer to requeſt, that the old barbarous tenure may be left out of his leaſe.

Note, however, that when I condemn this covenant, I do not plead for the tenant having a liberty of *ploughing* into the hedge, ſo as the landlord

lord ſhall not be able to take a ride round his own fields: there is nothing reaſonable in that;—only that he may dig them up, and carry the earth on to the land; after which, he ſhould ſow them with hay ſeeds, and by the time a good turf is come, it will be proper to repeat the ſame work: But whether in graſs or not, the ſpace to be left clear from the plough.

IV. *The hay made in each paſture to be fed in that paſture.*

This covenant I have known in more leaſes than one; and a more wretched one cannot be imagined. There is not a more pernicious cuſtom than that of feeding the hay in the fields. The graſs is poached,—there is no manure raiſed,----and the hay itſelf is half waſted. I would never ſuffer a tenant to ſtack a ſingle load in the field; but inſiſt on all being led home to the ſtack-yard. I would not hire the beſt graſs farm in England under ſuch a covenant.

V. *Turnips not to be fed on the land.*

In countries that know any thing of the turnip culture, the very mention of this covenant is ſufficient to raiſe a ſmile of indignation: And yet I have reaſon to inſert it here, for it was actually put into my own leaſe on a farm, part of it a *dry* gravelly ſoil; but I rejected it: It is, however, a common covenant in many leaſes, and I ſuppoſe had its original among the Iriſh, when they burnt their dunghills, and made their horſes draw by the tail.

If a farm, however, is all a clay ſoil, and wet, this is no bad interdict; but it would be as well to prohibit turnips, in that caſe, altogether.

VI. *A prohibition from ſowing particular crops, ſuch as oats, flax, rape, teaſils, &c. &c*

Theſe are common covenants throughout many eſtates ſituated on rich ſoils. Landlords are

apprehenſive, that the virtue of their land will be exhauſted by them; yet this idea is at beſt but weak. It is unreaſonable that a tenant ſhould have land in his hands, and be prevented from applying it to the beſt uſe, without an injury to the owner; and his own intereſt will force him, whether he would or not, to be attentive to the good of the land, in being careful of his own advantage. Except oats and rape, none of theſe crops will anſwer without plenty of manure, and uncommon tillage, in preparing as well as hoeing, weeding, &c. inſomuch that the moſt exhauſting crop, in its nature, may eaſily be turned into the moſt ameliorating one. Lucerne, I think, muſt be of a very exhauſting nature; for the roots are immenſe, and the quantity of the produce prodigious; and yet it is well known by many experiments, that, when tranſplanted or drilled, it is a very improving one; which is wholly owing to hoeing, and weeding.——As to rape and oats, they are not more exhauſting than many other common crops, ſuch particularly as wheat, which I know from experiment to do more miſchief to the land than oats, or any other grain; not as I apprehend from any peculiarity in its nature, but from being on the ground ſo much longer; on which account ſo many more weeds have time to grow, and perfect their ſeeds. And with oats I have little doubt but the effect of a collateral cauſe is taken for that of the grain itſelf. Oats are generally ſown the laſt crop of a courſe, whether long or ſhort, conſequently they leave the land in a worſe condition than any of the preceding ones; and this has been falſely attributed to the nature of the grain. Had it been cuſtomary to ſow them like wheat, or barley, on a fallow; no ſuch idea would ever have ſpread itſelf.

But

But why ſhould landlords, for very trivial reaſons at beſt, oppoſe the culture of ſuch vegetables as the good of the country require to be ſown? It is high prices that ſet the farmer upon cultivating uncommon crops. It is not beneficial for the manufactures of this kingdom that flax and teaſils, for inſtance, ſhould be extravagantly dear; but that farmers ſhould increaſe the culture of them, as the beſt method of reducing their price. This covenant, therefore, is in direct oppoſition to the kingdom's intereſt; which, like all public matters, one would ſuppoſe to give place to private *intereſt*; but here it gives place to private *caprice*.

There is no vegetable of ſo exhauſting a nature, but *may* be cultivated to the mutual benefit of the tenant and landlord; if it is not ſo, it muſt be owing alone to a want of proper management.

This covenant may in many caſes (except oats) be of no conſequence to a tenant; but there are others in which his agreement to it muſt ſubmit to a valuation *per* acre of deducted rent. It all depends on the ſoil of the farm.

Theſe covenants might be multiplied greatly, but the above are ſufficient to caution the farmer of what he agrees to, without *valuing* all as ſo much rent.

CHAP.

CHAP. V.

Of the nature and ſtate of the fences.

THIS article is a very important one; inſomuch that it is ſufficient alone to render ſome farms unprofitable bargains, which otherwiſe would be very beneficial ones. I divide fences into the following ſorts, *viz.*

I. Alive hedges.
II. Dead hedges.
III. Alive hedges and ditches.
IV. Dead hedges and ditches.
V. Ditches.
VI. Pales.
VII. Walls.

I ſhall firſt mention hedges that are alive; ſuch are the only fences in many parts of England, and particularly in *Hertfordſhire*. Be they ever ſo good of their ſort they form a very incomplete fence, as I have experienced to my coſt. The only method of making them any at all is by plaſhing; but, in that way, a gap is very poorly remedied, ſince the only means of ſtopping them is the bending down large ſticks acroſs the open ſpot; which, if they happen to be ſallows, willows, haſel, or any thing but ſtrong buſhes, have the effect of a rail, but not of pales; ſo that you often ſee gaps with rails, that grow acroſs them, ſufficient to ſtop horſes, cows, &c. but which are no fence againſt ſheep and hogs; and a gap made in ſuch hedges, ſoon after they are plaſhed, is almoſt irremediable.

A farm that is fenced in this manner may ſatisfy the tenants that have not been uſed to any thing better; but one who moves from a country in which ditches are deep and wide, will never be

be ſatisfied with ſuch imperfect fences. The conſequence of which is the great expence of digging ditches over the whole farm; a matter reduced to exact calculation preſently; ſo that a farmer may know his expence at once: but never let him hire ſuch a farm without remembering this article. My preſent farm in *Hertfordſhire* had not a ſingle ditch over the whole, and I am now at work in digging them to every hedge.

For theſe reaſons, the fences of ſuch countries, however good of their ſort, yet require a great and immediate expence.

But if even ſuch fences are much out of repair, the new tenant will have an additional expence in bringing them into good order. Perhaps he will find many of them to new-plant, a number of conſiderable gaps in the reſt to ſupply with thorns, and others ſo ſhrubby, and ſtinted in their growth, that many loads of buſhes will be wanted to form any hedge at all. All theſe points muſt be well attended to, and reduced to calculation; which, by a man that is uſed to buſineſs, is done preſently, and with little trouble.

II. Some farms I have ſeen that are fenced with dead hedges only, without any part of them living; dead buſhes interlaced among ſtakes drove into the ground: I would moſt heartily adviſe every farmer, that has an opportunity of hiring a farm ſo fenced, to avoid it as he would certain ruin. Though all other circumſtances were agreeable to him, this alone would be ſufficient to render it a moſt pernicious bargain. The only calculation the caſe admits, is to plan a complete new incloſure of the whole farm, with ditches and banks, well planted with thorns, and ſecured at top by dead hedges to defend the young quick. He may preſently calculate what the expence will

be;

be, and conſequently know what rent the farm under that circumſtance is worth: but he will find, it will ſo reduce the ſum demanded, that no hope of agreement will remain. Leave ſuch farms to the ſlovenly tenants that have been uſed to them, and to the indolent landlords, who can bear to poſſeſs ſuch wretched eſtates.

III. Farms that are fenced with live hedges and ditches are fortunately circumſtanced in being, in this reſpect, in perfection. The hedge and the ditch are a mutual defence to each other; and, when good of a ſort, are impenetrable to man or beaſt.

When a farmer views a farm of this kind, he ſhould principally attend to the hedges; to obſerve that there is plenty of green wood in them, and not many gaps ſupplied by that which is dead: for, if theſe circumſtances are faulty, he will find his expences, in the courſe of a leaſe, run very high, and his farm very ill fenced into the bargain.

As to the ditches in a country where they are common, the worſe they are the better; for they are generally, in that caſe, filled up with the overflowings of the land, and the rotting of the hedge wood; ſo that the ditches are ſo many dunghills, and will pay five times over the expence of cleaning and enlarging.

The ſtate of fences of this ſort, upon the whole, are found under a great variety of circumſtances: Calculations ſhould be made by the new tenant of thoſe expences which are extraordinary, and beyond what may reaſonably be expected in a farm, the leaſe of which is run out.

IV. Dead hedges with ditches are liable almoſt to as many objections as dead hedges only: A man who hires a farm ſo fenced, muſt be ſure not to forget the expence of planting all the banks with

with quick, and then new-making the hedges, or he will find himſelf involved in ruinous expences.

V. There are many objections to ſuch farms as are fenced with ditches alone.—They muſt be wet ones, or cattle will not be kept in by them; and wet ditches are never found but in wet ſoils, which moſt require draining; and conſequently dry ditches, that is, ſuch as the water runs freely out of. It is a moſt pernicious thing in clays to be forced to keep the ditches half full of water, for the ſake of making fences of them: For which reaſon it is always adviſeable, if the water can be carried off, to make banks to the ditches, and plant them, converting the wet ditches into ſuch fences as are uſed in countries fenced by hedges and ditches. This will be a great expence, but eaſily reduced to exact calculation.

VI. There are not many farms encloſed with pales, but ſome I have ſeen. When ſuch are to be hired, the farmer ſhould be very attentive to their ſtate; for, if he is to keep them in repair, the expence will be immenſe, unleſs he finds them in a perfect condition; the poſts and rails all ſound and ſtrong, and the pales the ſame; for, if they are the leaſt unſound, and he takes a long leaſe, his expences will run up almoſt beyond calculation. In this caſe, too much caution cannot be uſed. The beſt agreement would be to engage, as faſt as the pales decay, to pull them quite up, and make a new hedge and ditch well planted, and to convert the ſound parts of the old fence into mending ſuch as remain; and this would be for the landlord's intereſt as well as the tenant's.

VII. Walls are common fences in numerous counties, where quarries are found *under* the ſurface, or many ſeparate large ſtones *upon* it that will

will admit breaking. Well laid, either dry or in mortar, they are the beſt of all fences; and a moſt favourable circumſtance it is to a farm, to have it ſo well incloſed as to leave the farmer in an abſolute certainty of finding his cattle where he turns them; colts as well as cows, and even *hogs* as well as ſheep: Such excellent fences add greatly to the value of a farm, and ought to be *calculated* by a new tenant, as well as any diſadvantageous circumſtances I have mentioned.

But the great point to be attended to is the nature of the walls; for many that I have ſeen would coſt as much to keep them in repair as almoſt the worſt of hedges. Such as are built of lime-ſtones, and ſhiver out of the quarry in ſmall pieces, are very bad, and will fall upon very trifling aſſaults, and even by high winds. Theſe walls are a rent-charge to tenants.

On the contrary, thoſe that are cut into the form of bricks, only larger and laid even together in courſes, will ſtand as long as a brick-wall, though raiſed without mortar.

Likewiſe large pieces of rough grit ſtone, that will not burn into lime, make excellent walls, and have a great firmneſs from their roughneſs, which holds them together.

A diſtinction ſhould always be made between theſe kinds: the two laſt will ſtand an hundred years, as well as ſo many hours; but the former ſort are very expenſive in repairs. Proper eſtimates, in theſe caſes, ſhould always be made, that a farmer may know with ſome regularity his future expences.

Another part of fences common to all theſe kinds is that of gates, gate poſts, and ſtiles. Theſe being expenſive to repair, ſhould be viewed with attention, that the farmer may not be ſurprized

ſurpriſed in a few years with expences of which he had no expectation.

Theſe are points of great conſequence, let the fences be of what nature they may, and require exact eſtimates, not only with an eye to a valuation of rent, but alſo to that calculation which a farmer ever makes of his ability to hire and ſtock any farm that is offered him: For if expences come in the courſe of his leaſe which he did not expect or think of, they will probably come likewiſe without meeting a preparation to receive them;—which, is, in every reſpect, an unfortunate circumſtance, and ought to be guarded againſt with the utmoſt foreſight.

CHAP

CHAP. VI.

Of the buildings on a farm, and their repairs.

I NEED not remark that this is ſo important an object to a man who hires a farm, that it cannot be too much attended to.

Firſt, he ſhould view the dwelling-houſe, and examine whether it be ſuch an one as the ſize of the farm gives a man reaſon to expect; for no landlord can ſuppoſe that a farmer, who is able to hire 3 or 400*l.* a year, will ſubmit to live in a houſe proportioned to 30 or 40*l.* a year. A ſufficiency of room for lodging conveniently a large family, and as many ſervants as the farm requires, is abſolutely neceſſary. However, as the dwelling is rather a matter of convenience and ſatisfaction than profit, it depends upon the diſpoſition of the man more than on any eſtimates of profit and loſs.—Not ſo, however, with the Offices.

It is certainly of very bad conſequence not to have all the proper conveniences requiſite for a farm; and yet multitudes are without half; but the occupiers are ſure to ſuffer proportionably. This point will be beſt conſidered by making a liſt of ſuch buildings as are abſolutely neceſſary, *according to the common* practice of buſineſs; of *a perfect* one in this reſpect, it will be conſidered hereafter.

I. Barns.
II. Stables.
III. Cow-houſe.
IV. Granary.
V. Hog-ſties.
VI. Hen-houſe.
VII. Cart lodge.
VIII. Farm-yard.

Theſe, every one will allow, are indiſpenſable.

I. As to barns, the cuſtom of different counties varies greatly: In ſome ſcarce any barns are uſed,

uſed, only thraſhing-floors, with yards around them, for building the ſtacks of corn in. Theſe farmers have not ſo much in this point to attend to, as they cannot expect, how much ſoever they condemn the cuſtom, that landlords will raiſe barns contrary to the cuſtom of a country.

But where it is uſual to have barn-room ſufficient for the crops, a man ſhould attentively examine whether there is ſuch room, and alſo take notice of what the barn-floors are laid: Many are even at this day made of clay; ſuch ſhould be rejected, as a fine bright ſample of corn cannot be had from off them. They ought to be of oak plank 2 or 3 inches thick. Another point he ſhould not overlook, is the ſize of the thraſhing-floors; for if they are ſmall, and he is at any time in a hurry to get his corn out, ſo as to ſet ſeveral men in at a time, he will indubitably find them raiſe their price upon him for want of good room, and with great reaſon.

II. The article of ſtables, or ox-houſes, is a very important one. If a farm has been cultivated by a ſet of ſlovens, who have not given it above half the requiſite tillage, nor ever thought of keeping a team for the carriage of manures, probably he will not find half the room requiſite for the draught cattle he purpoſes to keep: It is never to be taken, of courſe, that a farm has ſtabling, &c. enough, becauſe the old tenant has not complained. He ſhould therefore examine whether there is room enough for his teams, —— proper places for the hanging up the harneſs, — alſo for the corn cheſts. —— That there be a chaff-bing, or houſe adjoining, ſo that the chaff may not need to be carried, and conſequently half loſt and blown away; the hay chamber or houſe adjoining. Theſe circumſtances are not connected with any thing in a complete ſtile:

They are abſolutely requiſite to all ſtables for farms of 40 *l.* a year, as well as 400 *l.*

III. A houſe for cows is actually neceſſary in all farms wherein that animal is kept; and yet I have viewed many that have no convenience of this ſort. The cow-houſe ſhould contain yoaks, ties, hooks, or whatever other name they may be called by; that is, places to faſten each cow in for milking, ſuckling, &c. one for every cow the farm will maintain. There ſhould alſo be in it bings, or ſmall apartments for the calves, each large enough to hold three or four, or five, but not larger; adjoining, or over, ſhould be a place for hay, and alſo another for ſtraw.

IV. Little is neceſſary to be added concerning the granary; only to take care that there is one ſufficient for the ſize of the farm; and not only for part of one crop, but for all the wheat and barley of two crops at leaſt; that, although a farmer may be obliged to thraſh his corn on account of feeding his cattle with the ſtraw, yet that he may not be forced to ſell at a diſadvantageous price, for want of room to ſtow his corn: This is a point of conſequence. There are many other requiſites for a *good* granary, but it is not to be expected that landlords will alter and build more than is abſolutely reaſonable. It is, however, much to be wiſhed that the granary may be ſo managed that rats and mice may not be able to get into it.

V. The conveniences for hogs are very deficient in many farms: a ſufficiency for the ſows that are kept, for each one ſtie, and alſo another for the fatting hogs, are abſolutely requiſite. In a large farm, there ought to be ciſterns for the waſh, butter milk, whey, malt-grains, &c. conveniently ſituated, ſo as to be emptied at once into the troughs, and a pipe or gutter from the dairy to it.

it. In a large, or even a middling farm, the hog is an animal of great conſequence, and proper places for keeping him muſt on no account be overlooked.

VI. The article of poultry is not one of the moſt conſequence in a farm, but it is of too much to be quite overlooked.

VII. That of a proper covering for all the implements in general, both of draught and tillage, is abſolutely requiſite There is not a more waſteful ruinous circumſtance, than the ſuffering waggons, carts, ploughs, harrows, &c &c. to lie expoſed to the weather. The expence of wear and tear will, under ſuch management, run up to 30 *per cent.* higher than with another man, who is always careful to keep them under cover, when not in uſe. For which reaſon the farmer in viewing the offices of a new farm, ſhould be ſure to obſerve whether there is plenty of room for all his implements; ſince the miſchief that will annually enſue to him, if there is not, is ſomewhat ſuſcep ible of calculation, and he ſhould eſtimate it accordingly.

VIII. But it is not ſufficient that theſe buildings ſhould be found upon every farm; they ſhould likewiſe be ſo placed as to form the walls or incloſure of one or more farm-yards, according to the ſize of the farm. The neglect of this point in ſo many parts of the kingdom is amazing. We ſee many farms that have no incloſed yards, and yet many buildings ſcattered about; and, what is amazing, the infatuation of landlords building new ones without placing them in the manner I mention.

In winter the cattle ſhould always be collected, and kept in the yard or yards, to eat up the ſtraw, hay, and ſuch of the turnips as the ſheep leave. By this management the fields are not poached,

the young ſpring graſs not eat up to the damage of the enſuing crop, and the cattle kept warm and dry all winter. Theſe are effects of having convenient yards, and are of great conſequence.

I ſhall, in another place, give my ideas of a complete ſet of farm-yards; therefore I do not, here, ſketch what a man would erect upon his own eſtate, but only ſuch parts as tenants ſhould expect upon every farm, and without which they will be much crampt and troubled in the practice of their buſineſs.

It is then neceſſary always to have one yard at leaſt, upon every farm, and upon large farms two at leaſt. They ſhould be encloſed either by buildings, high walls, or cloſe paling, that the cattle may be totally ſecure from wind. The mouth of a pond ſhould ever be in each yard, that the cattle may help themſelves to water, and not depend in any meaſure upon the thought and care of ſervants.

It ſhould be well bottomed with ſtone, gravel, or chalk, and not with a fall or deſcent to the pond, but to the center; and from thence not be allowed, in wet ſeaſons, to overflow the pond, but have a deſcent another way. The barns and other buildings ſhould be ſituated around the yards, for the conveniency of giving the ſtraw to the cattle, and that the dung from the ſtables, or ox-houſes, cow-houſe, and hog-ſties may be turned into it, and thereby mixed together. If there are any hay houſes (which are not however neceſſary) or a hay-ſtack yard, it ſhould join one of the farm-yards, that it may be ready for feeding thoſe cattle that are kept on it.

In proportion as theſe circumſtances are found among the offices of a farm, the more advantageous it will be. They are, upon the whole, of very great importance; inſomuch that a farm much

much wanting in them can ſcarcely be a beneficial one, however excellent all other circumſtances are. I may certainly be miſtaken in this matter, but I am clear that I would not hire the otherwiſe beſt farm in England, if deſtitute of theſe conveniences, or very defective in them: A farm indeed may be advantageous enough to induce the tenant to build, but that is a circumſtance not to be taken into the preſent account.

Having offered theſe hints upon the buildings neceſſary, we muſt next conſider them with an eye to their repairs. In many countries this expence lies upon the tenant (with that of the dwelling-houſe alſo), after they are put into repair by the landlord. It is in this caſe highly requiſite that the new tenant views them with the utmoſt attention; that he may be able to form as exact an eſtimate of the annual expence as the nature of the thing will allow.

All the timbers ſhould be examined; the boarding, brick work, tiling, thatch, plaſtering, paving, &c. &c. &c. every article viewed attentively; their duration eſtimated, and the expence of the probable reparations reduced to calculation. If ſuch cautions are not taken, a man may find himſelf in a few years in the midſt of unexpected expences; than which nothing can be more fatal, unleſs he is (as indeed all ought to be) much ſtronger than his farm.

It is very eaſy to calculate the amount of the repairs during any given number of years, then to divide it into an annual ſum; and, laſtly, to proportion it to ſo much an acre rent. This is the practice that ought in numerous inſtances to be followed.

CHAP. VII.

Of roads and paths through a farm.

AT firſt ſight this may appear a circumſtance too trivial to be conſidered; but that notion is a great miſtake. I have ſeen many farms ſo interſected with theſe nuiſances, as to reduce the land abſolutely one half in value. The inconveniences preſent themſelves by thouſands.

The fields acroſs which roads lead are carted up from ſide to ſide, though it be only a farm or two that has a right of paſſing. The fellows, who drive their teams, have no conſideration for your fields; they ſeek nothing but the plaineſt, ſmootheſt track, and conſequently do your land, every time they go over it, freſh damage. If it is paſture-ground, and the road not confined to one track by fences, it can never be mown; but, whether it is proper or not, muſt always be fed. If it is arable land, the miſchief is yet greater; for the corn is not only deſtroyed as it grows, but the ſoil ſo cut up and poached in winter, that it is a long time after they vary their track before it will yield any profitable produce; conſequently, a great breadth of land is always in deſtruction. I appeal to all thoſe who have the plague of unconfined roads through their farms, whether I have exaggerated any one particular. If ſuch an one runs a mile through a farm, it inevitably deſtroys or greatly damages, thirty acres of land.

All paths are likewiſe attended with numerous evils; they often croſs corn and graſs fields, in which caſe the corn and hay are much trod and ſpoiled, on each ſide the path, for a conſiderable diſtance. This miſchief never fails.

A path

A path that leads through a turnip field may be known by the peelings, ſcattered ones, &c. half a mile before you come to it.

The idle, wandering, and other people that frequent theſe paths, are ſure to ſtop at every field in ploughing, or any where that men are at work, to have a diſh of diſcourſe with the ſervants, or labourers; to the no ſmall detriment of the farmer, whoſe teams ſtand ſtill as long as the converſation laſts.

Hedges are broke down, ſtiles damaged, and gates left perpetually open, from both roads and paths, wherever they are found.

I know a farm of near 300*l.* a year, in *Eſſex*, with a common path through the farm-yard. A more unfortunate circumſtance could ſcarcely happen; it was the reſort of half the thieves and pilferers in the country, who made uſe of the opportunity of *paſſing on their own buſineſs* to viſit the barns, wood yard, and poultry houſe, to the certain decreaſe of the corn, wood, poultry and eggs. The ſtable-door was always the ſpot for a goſſiping party.

A large farm, in a rich country, can ſcarcely be found without the inconvenience of one or two paths; but if they happen to be numerous, or a road or roads unconfined through it, or a path through the farm-yard, I would, on no account, hire ſuch an one, without a great and adequate deduction of rent. When a farm is viewed, minutes ſhould be made of all roads and paths through it, and ſhewn to the tenant in a map of the farm; and if they are numerous, and croſs ſeveral fields, let him form an eſtimate of the annual damage he expects to enſue, and calculate his rent accordingly. If he, in hiring his farm, ſlights this matter as of little importance, he will aſſuredly repent it in a few years.

CHAP. VIII.

Of the ſtate of the public roads, and diſtance from market.

THIS is another object too often overlooked by farmers, and yet they are the perſons who, moſt of all others, ſuffer from bad roads and long carriage. It is no matter of wonder that farmers are not readily at the expence of mending roads when bad, but it is very aſtoniſhing that they will hire farms ſituated in the midſt of execrable ones, when they might, with as little trouble, fix themſelves in good ones.

The ill conſequences of bad roads are numerous, and of the worſt kind; they inevitably occaſion a great extraordinary annual expence, nay, a monthly one; for every time the waggons go out with corn, wood, hay, ſtraw, or to fetch manure of any kind, the horſes are proportionably weakened and jaded; they muſt be fed accordingly; the waggon and harneſs are for ever coming in pieces, and conſtantly wearing out. Theſe expences are regular, and without intermiſſion; But there is another equally great, and that is, the loſs of carrying a *ſmall* load of every commodity, on account of bad roads, when a *large* one would be carried, were the roads good. This raiſes the expences of every journey prodigiouſly; but very ſlight calculations will ſhew this point in its true colours.

The diſtance from the market to which the corn is carried, is alſo a point of great conſequence: Perhaps the average diſtance over the whole kingdom does not exceed a day's journey, in going and returning. I believe the average diſtance is not ſo great; as in many counties the neareſt

neareſt market-town is the place to carry to, as well as to ſell at. A day's work may be reckoned ten miles, which is done with eaſe. Now if a farm in this reſpect is above the average of farms, the perſon who hires it ſhould conſider the evil in the rent he offers.

In *Suffolk* and *Eſſex*, 25 miles are a common diſtance; and the roads none of the beſt It is there two complete and hard days work, to carry 10 quarters of wheat, or even barley, to market. The expence is enormous, as will appear from a ſlight calculation.

	l.	*s.*	*d.*
The uſe of 5 horſes, on ſuch an occaſion, is undoubtedly to be reckoned at 2 *s.* 6 *d.* a horſe *per* day - - - - -	1	5	0
The two men are allowed for their expences - - - -	0	5	0
They carry with them a meal of bread and cheeſe, and 2 or 3 quarts of ale; call it - -	0	2	0
Their time - - - -	0	4	0
Wear and tear of the waggon and harneſs; this cannot be reckoned at leſs than - - -	0	3	0
Sundry ſmall expences - -	0	1	0
	2	0	0

It is true, they ſometimes gain back-carriage of coals, for which 18 *s.* are paid; but then the wear and tear, and uſe of the horſes, are greater, and conſequently the profit by them the leſs. But back-carriage is, however, a mere uncertainty, and therefore not to be taken into any account.

Here

Here we find the expence of carrying out the corn amounts alone to 2*s*. a quarter, which is prodigious. Suppoſe a farmer raiſes 500 quarters in a year, the expence of the carriage runs up ſo high as 50 *l*. full 30 *l*. of which ought to be reckoned as extraordinary, and charged to the land with rent.

Some ſavings may be made, it is true, by uſing broad-wheeled waggons; for which reaſon they ſhould ever be uſed on farms large enough for 9 or 10 horſes; but then others not ſo large will raiſe greater quantities of corn than I have calculated, and conſequently cannot have thoſe machines for want of the proper number of horſes.

Theſe hints, I apprehend, are ſufficient to prove that goodneſs of roads, and a moderate diſtance from markets, are circumſtances highly neceſſary to be attended to in the hiring a farm; and that, if they are wanting, the rent ought to be eſtimated accordingly.

CHAP.

CHAP. IX.

Of the tythe.

THIS is ſo conſiderable a point, that no man, in hiring a farm, is forgetful, or inattentive of it. It is as much to be conſidered as the rent itſelf, being in fact a rent, and to be conſidered as ſuch. If a farm is tythe-free, the following remarks are conſequently not applicable to it: ſuch farms are in that reſpect excellent, and cannot be too much valued. The landlord's rent, indeed, is always proportioned; but no matter, the *certainty* is the valuable circumſtance; uncertainties are pernicious.

A farmer, at the ſame time that he hires his farm, ſhould agree with the parſon for his tythe, if it is the cuſtom to compound; and by no means abſolutely agree with the landlord, until he knows, or can nearly gueſs, what he is to expect from his eccleſiaſtical landlord. If the latter refuſes previouſly to agree with him, he ſhould then become acquainted with the general manner of agreeing, and the terms in that neighbourhood, and expect to be dealt with as hardly as the hardeſt. If this is not his account, he is very imprudent indeed.

In many places, (indeed more perhaps than compounded) the tythes are gathered. —— All farmers know well enough the oppreſſive exorbitancy of this tax ſo collected, which is not fixed in proportion to any given value, rent, product, &c. but increaſing regularly with his induſtry and improvements. A few words diſcuſs this point. —— On no account hire a farm where gathering the tythes is cuſtomary, or where there is any peculiar probability of their being ſo. This is a matter

matter beyond the power of calculation, which will increaſe upon you as long as you are induſtrious;—will lay *violent*, though *legal* hands on the tenth, not of your rent, not of your expences, but of the whole of your produce, that is, of rent, labour, and expences of every kind. In a word, it is a tax of 10 *per cent.* upon every ſhilling of your expences, of what kind and ſort ſoever.—Avoid ſuch an oppreſſion, as you would a peſtilence.

Some compoſitions are almoſt as bad as the taking in kind: ſuch are an annual agreement for every field, made a little before harveſt. The parſon rides through your farm, and holds forth to the following purport.

"Farmer,—this is an excellent crop!—A noble crop of wheat, indeed!—You muſt pay me 10 *s.* an acre for it.—*That* is not quite ſo good; I will accept 8 *s.* for that.—This barley is indifferent; 5 *s.* an acre will be about the mark.—Ha! a noble crop of oats, truly! well worth 6 *s.* an acre.—Theſe are bad ones; I will be contented with 2 *s.* 6 *d.*—But there ſeems to be a very fine field of beans;—aye, indeed, a very fine crop! 7 *s.* muſt be your tythe for them*."—Thus will your crops be ſcanned, and either without appeal, or gathered.

Thus much, I think, is ſufficient to prove how important an object tythe is,—and how much it behoves a man to gain a thorough knowledge of what he is in this matter to expect, before he agrees with the landlord.

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* This is a common practice about Chelmsford in Eſſex.

CHAP.

CHAP. X.

Of town charges.

THESE comprehend rates of the poor, church, conſtable, and ſurveyor; and the duty upon the highways. All theſe public expences vary prodigiouſly in different pariſhes; and as they are to be conſidered exactly in the ſame light as rent, muſt be known accurately before the agreement with the landlord is concluded.

In ſome places, particularly in towns, the poor-rates alone are ſo high as 8 *s.* in the pound rent. Whatever they amount to, the ſum for ſeveral years back ſhould be known, and the average of it expected in future; unleſs ſome peculiar circumſtances give a reaſon to look for variations.

The ſame attention is requiſite to the other rates; and the ſtate of the roads, reſpecting the days of ſtatute duty, examined.

If a farmer is neglectful in theſe matters, or takes them too much upon truſt, he may eaſily be ſurprized with expences which he did not expect; and I have often remarked, that, in many caſes, this is very pernicious. Nothing can be more fatal than the viewing theſe ſeveral charges in different and ſeparate lights, and not drawing them with the rent into one ſum, that the total may be certainly known.—There is no difficulty in procuring good intelligence of theſe points; they are of ſo publick a nature, that a very little trouble will gain a complete knowledge of them. In many parts of the kingdom, they will, united, exceed the rent: how careful

careful therefore ſhould a farmer be, to be well informed in each article; that, when he has concluded the view of a farm, and the enquiries concerning it, he may ſit down and calculate what will be the amount of his annual payments? If he does not this, he will, at beſt, be in the dark.

It ſurely is needleſs to add, reſpecting theſe charges, that he ſhould not forget the probability of their *being raiſed*; that is, of his paying than the preceding tenant. It is no more than prudent, in general, to expect to pay the *real* value.

CHAP.

CHAP. XI.

Of the price of labour.

I SUPPOSE, throughout theſe ſheets, that my farmer deſigns to cultivate his land in a clean, neat, and ſpirited manner, to make the moſt of his ground: If ſuch is his intention, he will find labour his greateſt expence, and much exceeding the rent. It is therefore evidently of great conſequence, whether the price of this neceſſary is dear or cheap;—that is, higher or lower than what is common,—or, perhaps, than what he has been uſed to. The variations of the prices of labour, in different parts of the kingdom, are ſo great, that a man may find his expences in one farm run 20 *per cent.* higher than in another, though the acres be the ſame, and every other circumſtance of ſoil and management.—It is therefore of very great importance to him, to know well the prices of the country in which he purpoſes to ſettle.

But an account of this may very eaſily be taken, in a deceiving manner:—The pay *per* day, of the different ſeaſons, muſt not only be taken, but alſo the price of ſuch work, as is uſually done by the piece. A country may be very dear in day-work, but moderate in that done by the piece; the average, or balance, muſt in this caſe, be taken, which, though not to be done with minute accuracy, yet an idea tolerably clear may be gained of the truth, which is infinitely better than leaving it in the dark, and to chance.

Suppoſe the average earning of a labourer is found to be 1 *s.* 2 *d.* a-day, the year round, piece-work included, upon any given farm, which being left by a man who moves to another, he takes a freſh

a freſh account of labour, and finds the ſame average 1 *s.* 5 *d.* a-day. We will ſuppoſe him to employ ten labourers, the difference of this 3 *d.* a-day will then amount to 45 *l.* a year, which is certainly no trifle; and ſhews that a farmer ſhould be very attentive to this point, that he may be enabled, where labour is cheap, to overlook the more unprofitable circumſtances, in a farm beneficial upon the whole; and where it is dear, that he may not loſe ſight of ſo material an expence among others, and determine, therefore, to reject a bargain which may be ſo additionally unprofitable.—Too much cannot be ſaid on this point, for no object is more important: but the evident conſequence of it will, it is apprehended, plead ſtronger with thoſe who are upon taking new farms, than any thing more I can add. Let me, however, remark that the price of labour may very eaſily make it better worth a farmer's while to give 15 *s.* an acre, in one place, for land, than 12 *s.* in another, ſuppoſing the utmoſt ſimilarity.

CHAP.

CHAP. XII.

Of ſome other circumſtances which a farmer ſhould attend to in hiring a farm.

THERE are a few other points which deſerve mention, but which may be thought by ſome too unimportant to be treated of in chapters by themſelves.

I. The number of acres in a farm is a very material point; I mean, whether the ſpecified number be conjectured or aſſured. In ſome leaſes, in the recital of the acres, it is common to add *more or leſs*; in others, the number is aſſured, and the rent ſtated *per* acre. The latter is much the faireſt, and moſt ſatisfactory way; for, in a long courſe of years, with the variations of ſurveys, the changes of lands, and the alterations of fields, miſtakes very often creep into ſurveys; and, upon trial, it has been found there has been a much leſs quantity of land than mentioned in the leaſe. For this reaſon, it is but prudent in the farmer to view the fields attentively, and to meaſure thoſe which appear to the eye to be the ſmalleſt meaſure; that is, if the landlord inſiſts upon the farm being let for ſuch a number of acres, *more or leſs*.

II. When a farm is ſituated contiguous, or near to the manſion-houſe of the landlord, it is not an uncuſtomary covenant, for the tenant to engage to do a given quantity of carting for the landlord every year There is nothing to be impeached in ſuch an agreement, but it ought to be carried, like all the reſt, to account, and va-

lued as ſo much rent; and this remark is applicable to all other kinds of covenants, which contain an agreement to pay or perform any ſum of money or ſervice.

III. Some landlords will not grant leaſes at all; others for only 3 or 7 years: This is a matter of ſmall conſequence to thoſe tenants who purpoſe conducting their farm in a ſlovenly negligent manner, never to expend any thing beyond abſolute neceſſities, and always to get from the land the utmoſt. To *ſuch*, theſe maxims are very indifferent; for let them leave the farm when they will, they can loſe nothing by former expences, the land never owing them any thing; —but the caſe is ſurely different with a man who deſigns to expend conſiderable ſums of money in bringing the land into perfect order; a three, or a ſeven years leaſe, is to him much the ſame as none at all; and he would be an egregious fool, to diſpoſe of his money upon any ſuch uncertainties. If a man really means to be a good farmer, it can never anſwer to him to enter a farm with a ſhorter than twenty-one years leaſe; nor can it ever be for the advantage of the landlord to let his farms on ſhorter. I am now ſpeaking of rich countries: As to poor ones, to be incloſed, or marled, or chalked, *&c. &c.* it is at once apparent that no man will hire them without a long leaſe.

But it may be ſaid, that farms are often very well managed by men that have no leaſes. This I readily grant; but then they have, probably, been bred up on their farms; they, as well as their family, may know their landlord; and ſeveral generations paſs without a leaſe, and yet nothing unreaſonable happens. But this is a peculiar caſe; I am ſuppoſing a landlord and tenant,

nant, that are ſtrangers, coming together; in which caſe, *caution* is at leaſt requiſite. Beſides, we often ſee whole ſets of old tenants trimmed up at once in their rents, not unreaſonably indeed; but ſufficiently to ſhew, that the farmer with a leaſe in his pocket is in a much more ſecure ſituation, than another who has none.

IV. A farmer ſhould be attentive, when he hires his farm, that he engages to leave it as he found it in every circumſtance; that is, to go out without the new tenant's having more advantage of him, than he himſelf has of the tenant he ſucceeds; this principally concerns the payment for tillage, carting, *&c. &c.*

V. It is uſual, in all rich countries, for the farm to find the farmer in firing; if it does not, the deficiency ſhould be noted.

CHAP. XIII.

Of the method of reducing the ſubjects of the preceding chapters to a regular account.

HAVING thus gone through the principal objects of the farmer's attention, in hiring a new farm; it is neceſſary, in the next place, to ſtate the method that ſhould be followed in forming eſtimates of the amount of each article, in ſuch a manner, that the obſervations made may be reduced to one conciſe and clear view, from which may, at once, be deduced the point, whether any farm be advantageous, or the contrary.

In doing this, the moſt compendious, and indeed the ſureſt rule (as it is founded on particular experience) is to fix upon a criterion, by which, analogically, to judge of ſimilar matters. For inſtance, a farmer may fix upon his laſt farm, or any other, of which he has a thorough knowledge, by way of a compariſon, to examine new ones. This will be exemplified in the following ſketches. It will be neceſſary here to aſſume the language of a farmer, and ſuppoſe myſelf in the ſituation of having viewed a farm, and deliberating upon the rent it is worth.

* * * * *

MEMORANDUM.

I calculate the rent of my old farm at X. Y. as follows.

	l.	*s.*	*d.*
Rent, - - - -	300	0	0
Tythe, - - - -	50	0	0
Poor rates, - - - -	30	0	0
Carry over,	380	0	0

Church

Brought over, £.	380	0	0
Church ditto, - - -	2	0	0
Conſtable's ditto - - -	1	10	0
Surveyors ditto, - - -	7	10	0
Value of my ſtatute work, -	6	6	0
Window tax, - - - - -	2	10	0
Repairs of the houſe and offices, -	4	11	0
Three days carting for my landlord,	2	0	0
Four loads of ſtraw for ditto, -	2	10	0
Total rent, £.	408	17	0

As there were no other covenants or circumſtances of extraordinary expence attending the farm, this is the whole of the rent; and as I had 400 acres of land, it is not quite 1 *l.* 6 *d.* *per* acre, upon an average, all round; which rent I divide, as follows, according to the ſoil:

		l.	*s.*	*d.*
45	Acres of fine dry crumbly clay land, at 6 *s.* - - -	58	10	0
30	Of a ſtiff wet baking clay, at 10 *s.* - - -	15	0	0
20	Of a reddiſh brick earth loam flat and rather wet, at 8 *s.* -	8	0	0
60	Acres of a light ſound gravelly loam, at 20 *s.* - -	60	0	0
40	Of a cold wet ſpringy gravel, at 12 *s.* - - -	24	0	0
35	Of a fine rich black ſand, at 20 *s.* - - -	35	0	0
20	Of a dry looſe ſand at 5 *s.* -	5	0	0
50	Of a light, dry ſound rich loam, at 30 *s.* - -	75	0	0
50	Acres of meadow ground, ſubject to be overflowed in hay time, at 20 *s.* - -	50	0	0
350	Carry over,	330	10	0

		£.	s.	d.
	Brought over,	330	10	0
20	Ditto not ſubject to that evil, and the herbage remarkably fine, at 40*s.*	40	0	0
12	Acres of dry ſound rich upland graſs, at 30*s.*	18	0	0
6	Ditto of ditto, but richer and a better herbage, at 40*s.*	12	0	0
12	Rough graſs, at 14*s.*	8	8	0
400	* Total,	408	18	0

Theſe prices are points of compariſon, by which I am to judge of the farm now before me. It conſiſts of the following acres of different ſoils, which I value as under.

N° 1.

		l.	*s.*	*d.*
30	Acres of rich, ſound crumbly clay; it has been hollow drained, and, I think, is as good as that which I occupied in my laſt farm; rent, therefore, 26*s.*	39	0	0

N° 2.

17	Acres of ſuch clay as N° 1. but, for want of draining, the water appears much, nor is			
47	Carry over,	£. 39	0	0

* I am ſenſible I have here ſketched *many* ſorts of land for *one* farm, but this was neceſſary for the explanation of the idea. However, I have ſeen farms of 400 acres with as great variety, though not of the ſame kind as theſe.

there

47	Brought over,	£. 39	0	0
	there ſo good a fall to carry it off. It is not ſo good as the other by 6 *s.* an acre: ſay, therefore, at 20*s.* - -	17	0	0

N° 3.

12	Acres of dry ſound red loam, has a good fall, and from its not adhering to my feet in walking over it (it being winter), I judge it to be kindly land, and worth as much as my 60 acres of gravelly loam, in my laſt farm, or 20*s.* -	12	0	0

N° 4.

15	Acres of very flat wet ſpewy clay, worſe I think can ſcarce be met with, one acre of N° 3 worth 4 of it; the rent 5*s.* -	3	15	0

N° 5.

20	Acres of a flat, cold, looſe, woodcock, brick earth loam, very wet and poor. The 20 acres of reddiſh brick earth in my laſt farm better, I reckon, by 1 *s.* an acre; therefore 7*s.* -	7	0	0

N° 6.

10	Acres of light gravel, has not ſo much of the loam in it as the 60 acres in my laſt farm: It will certainly burn in a dry ſummer. It is worth, on compariſon with them, 15*s.* -	7	10	0
104	Carry over,	£. 86	5	0

104	Brought over,	£.	86	5 0

N° 7.

50 Acres of a cold, ſpringy gravel, wetter I think than the 40 in the other farm; not worth ſo much by 3 *s.* an acre; therefore at 9 *s.* - - 22 10 0

N° 8.

20 Acres of ditto, but wet only at places, to the amount of about 5 acres, the reſt better land, but will burn: I value it at 11 *s.* - - - 11 0 0

N° 9.

10 Acres of a dry blowing ſand, not ſo good as the 20 I had before; ſay, 4 *s.* - - 2 0 0

N° 10.

25 Acres of a black ſandy loam; I take it to be 5 *s.* an acre better than the 35 in the other farm; at 25 *s.* - - - 31 5 0

N° 11.

20 Acres of a light, dry, ſound, rich loam; much ſuch land as the 50 in the firſt farm, but one part rather gravelly; however, as another is blacker and more crumbly, but at the ſame time moiſt, I reckon it, upon a par, 30 *s.* - - - 30 0 0

154	Carry over,	£.	183	0 0

229 Brought over, £. 183 0 0

N°. 12.

70 Acres of meadow land, low, but not ſubject to be overflowed; the herbage exceedingly good: I think it better graſs than any I had before, and worth 45 *s.* - - 157 10 0

N° 13.

20 Acres of ditto, but ſo very low that it will ſcarce ever eſcape being overflowed even in ſummer; I value it at 18 *s.* the herbage is not good. - 18 0 0

N° 14.

10 Acres of dry ſourd upland graſs, on loam. It is rather better than the 12 in the other farm; at 32 *s.* - - 16 0 0

N° 15.

150 Acres of very wild rough graſs, many parts of it on a burning gravelly ſoil; others on a looſe wet loam, and never drained: The whole overrun with mole and ant-hills, buſhes, briers, and ſome whins; if allowed to plough it, is worth 10 *s.* an acre. - 75 0 0

N° 16.

21 Acres of white chalky arable;

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500 Carry over, £. 449 10 0

very

500	Brought over,	£.	449	10 0
	very wet and adheſive: I have no experience in this land, but judge, from the view of it and what I can learn from enquiries, that it is not worth above 7 *s.* an acre. - -		7	7 0
500		£.	456	17 0

So much for the farmer's private valuation of the *land*, which is drawn up on a ſuppoſition that all other circumſtances are upon an average with farms in general; theſe are next to be viewed, to diſcover whether they are above or below ſuch average, that in either caſe the exceſs may be charged.

The fences are various, in general live hedges and ditches; and though I remark many gaps and ſhards in them, yet ſuch muſt be expected in all farms newly hired: but the 150 acres of rough ground having been once a park, is incloſed only with an old pale, much of it in that degree of repair which renders it tenantable, but will never ſupport it through the leaſe: I ſhall conſequently be engaged in a great expence (as I am to keep them in repair) before the expiration of it. It is a matter of difficult calculation, but the neareſt eſtimate I can make, on an exact view and meaſurement, is that theſe 150 acres will coſt me, in 21 years, in repairs of paling, the ſum of - - - - - - - - £. 70 0 0

If the fence was a hedge and ditch like the reſt of the farm it would coſt me, beſides the amount of wood gained - - -	20	0	0
Exceſs of the paling, - -	50	0	0
which, in 21 years, is *per annum*, -	2	7	7

Carry over, £. 2 7 7

	£.	s.	d.
Brought over,	2	7	7
The 10 acres of upland paſture, and ſeveral of the arable fields, which muſt be under clover ſome years, and fed, have no water for cattle: I muſt ſink 3 ponds at leaſt: the ſtuff that comes out *may* pay; but as I ſuſpect one field being all gravel, I think it cannot pay: I therefore reckon the expence of one pond, which will coſt me 10*l.* at leaſt, or *per annum*, for 21 years, - - - -	0	9	6
There is a road through one field of 50 acres, which, being unconfined, I muſt either ſubmit to great annual loſs or fence it in; this will coſt me 18*l.* or *per ann.* -	0	17	1
Five foot-paths run thro' the farm for a conſiderable way, I would have compounded for two, ſhall therefore charge three: they will inevitably do me 30*l.* damage in one way or other; or *per annum*, - - - -	1	8	6
The buildings are moſt of them good, and pretty well contrived, but they form with pales only one farm-yard, whereas two are indiſpenſably neceſſary to ſuch a farm; I cannot make another out with ſuch an high pale as is neceſſary under 15*l.* or *per annum*, - -	0	14	3
I underſtand that the landlord will make *no additions*; but there			
Carry over, £.	5	16	11

muſt

	£.	s.	d.
Brought over,	5	16	11
must be a new chaff-house built, which will cost me 12 *l.* or *per annum*, - - - - -	0	11	5
	6	8	4
The interest of these sums must be reckoned, as I shall expend them directly; they amount to 105 *l.* say 100 *l.* at 4 *per cent.* -	4	0	0
	£. 10	8	4

Next, I must examine such circumstances, *in favour* of the farm, as are susceptible of calculation.

	l.	*s.*	*d.*
In the first place, the 500 acres are perfectly contiguious, even circularly so; I know scarce any farm of this size, that lies so well; had I 500 acres in the common, or average degree of contiguity, I would give 50 were they laid together as these are; I shall therefore charge it at 50 *l.* or *per annum*, - - - - -	2	7	7
The roads to market (which is distant only 6 miles) are so extremely good, being turnpike, that I can in any manner carry a fourth more corn at a time, than in common roads; there are 400 acres of arable, suppose 160 of wheat and barley every year, and 4 quarters *per* acre on an average, I shall then have 640 qrs. to carry to market; as I shall have a broad-wheeled waggon, I must calculate accordingly. In my last farm I			
Carry over,	£. 2	7	7

carried

Brought over,	£. 2	7	7
carried 30 ſacks on an average 10 miles, which coſt me 9*d.* a ſack, or 1*s.* 6*d.* a quarter. I can here carry 40 ſacks, or 20 qrs. at 1*s.* a quarter, there is to be charged therefore in favour of this farm 6*d.* a quarter on all corn carried to market, or - - -	16	0	0
Upon viewing the offices attentively, I think them much beyond the common ones, and will ſave me much labour in carrying the food of cattle backwards and forwards, and alſo enable me to make a much larger quantity of dung than in moſt yards. I value theſe circumſtances at *per annum*, -	8	0	0
Total, -	26	7	7
Ditto the unfavourable articles, -	10	8	4
In favour of the farm, -	£. 15	19	3

The farmer having proceeded thus far in his calculations, comes next to rent of various kinds: on this head the landlord muſt be the laſt perſon he treats abſolutely with. He goes firſt to the parſon, and enquires his terms of agreement, in caſe he hires the farm: he is anſwered that no agreement of that ſort will be made, nor until he has hired it.—Alarmed at this anſwer, he next enquires into the probability of the tythe being taken in kind; he finds nothing but compoſitions around him, and no peculiar reaſon for his being gathered any more than the reſt: the average of the compoſitions he diſcovers to be 4*s.* an acre all round.

round. This ſum he therefore writes down as his own tythe, or, - - £. 100 0 0

Poor rates: his predeceſſor paid to the amount of 60 *l.* a year, and as he finds no probability of his paying more, he writes that ſum, -	60	0	0
Conſtable's ditto, - - -	3	0	0
Church ditto, - - -	4	0	0
Surveyor's ditto, - - -	10	0	0
Value of the ſtatute work, -	7	0	0
Window tax, - - -	3	0	0
The repairs of the houſe and offices are calculated at - -	9	0	0
Deduct from theſe articles the amount of the balance of the former account in favour of the farm, - - - -	196	0	0
	15	19	3
Total rent hitherto brought to account, - - - -	180	0	9
His valuation of the land amounted to - - - -	456	17	0
Deduct the above ſum, -	180	0	9
£.	276	16	3

Poſſeſſed of this remainder, he is ready (and not till then) for the landlord. As this is preciſely the ſum he can afford to pay in landlord's rent, he knows the utmoſt to offer;—and if he gets it cheaper, the value of his bargain — and if dearer, the amount of the exceſs; ſo that he is abſolutely prepared, in point of all previous knowledge, to treat to advantage.

If any covenants are demanded of an annual payment of ſtraw,—of carting,—or in any other form, they muſt be added to the rent caſh, and the total conſidered as *rent*. Let us, for the ſake of

of the concluſions, ſuppoſe the landlord's total demand to come within the ſum deſigned to be agreed to; — and with that demand ſome covevants in the leaſe ſpecified that were not expected. For inſtance, the tenant not to break up any graſs land, not even the 150 acres of rough ground. —Clover not to be conſidered as a fallow, in the cropping the fields, *&c. &c.*

Theſe, or any other covenants of the kind, muſt then be valued. The 150 acres to plough were valued at 10*s.* but to remain in graſs they are worth but 5*s.* the deduction therefore, - - - - - - - - £. 32 10 0

There are 150 acres (ſuppoſe) the farmer will find it moſt profitable to cultivate with clover as a fallow: if it is ſtruck out, he muſt ſubmit to much higher expences of all ſorts that relate to tillage, and at the ſame time not get better, or perhaps ſo good crops; this circumſtance leſſens the value 3*s.* an acre, - - - 22 10 0

55 0 0

Rent before agreed to, - - 276 16 3
Now to be deducted, - - 55 0 0

£. 221 16 3

The remainder is what he is now to offer the landlord, in caſe the obnoxious covenants are inſiſted on.

I have, in this manner, gone through the method of reducing every article to an eſtimate; and I cannot but apprehend the certainty attending ſuch a method muſt recommend it infinitely more than hiring a farm upon a ſuperficial view, and

and without any other eſtimates than mere fleeting ideas. A man ſhould not only act prudently, but know wherein he does it, and to what degree.

Let me, however, warn the perſon who is about to form ſuch a calculation as the preceding, to give the value of the land he views fair play, and not, through avarice, eſtimate it below the real value: if he gets the farm below the amount he rates it at, ſo much the better; he will then have the ſatisfaction of knowing to what amount he has the better of the bargain: If he does not form ſo exact an eſtimate as to be determined not to exceed it one ſhilling, he leaves the treaty with his landlord to the common haggling way of making bargains, and will be loſt in confuſion, having no abſolute point to which he may advance, and no further.

This regular method of arranging his ideas, of reducing every thing to calculation and certainty, will alſo give a man great advantages when a farm is to be hired at a ſhort warning, with ſcarce any time for conſideration. In that caſe, a man who takes no ſuch guide rejects the bargain for want of time to reflect,—to conſult his friends,—and to make an hundred trivial enquiries *of what ſort of crops the laſt tenant gained?* and other ſuch trivial matters. But he who has made a regular eſtimate of every article, can treat and conclude in five minutes as well as five months; and conſequently will have, in every caſe, the greateſt probability of never loſing a beneficial bargain.

CHAP.

CHAP. XIV.

Remarks on the conduct of common farmers, in proportioning their land to their money.

IT is neceſſary to introduce the following calculations, by a few obſervations on the method generally followed by common farmers, of judging from their fortunes of the quantity of land they are enabled to hire. In the eſtimates which I ſhall give, there will be found many variations from the common conduct; I ſhould, therefore, give my reaſons for ſuch variations.

It is univerſally known in every part of the kingdom, that farms are every day hired with much ſmaller ſums of money than the moſt conſiderate people would allot for the purpoſe. It is not gentlemen and landlords alone who think ſuch ſums too ſmall; even farmers themſelves will often own, that a larger ſum of money is really neceſſary, than often poſſeſſed upon the hiring of a farm; and they will allow that it would be more advantageous to cultivate 200 acres completely, than 300 indifferently, for want of plenty of money: And the practice of the moſt enlightened ones prove the ſame thing as the ſentiments of the reſt, however contrary to their conduct; for we very often ſee very large ſums applied to the culture of farms, and ſuch as render a ſpirited practice neceſſary to pay the intereſt of.

The cauſe of ſuch numerous deviations as we find from prudence, in this caſe, is the avarice of hiring a large quantity of land; their great ambition is not to farm *well*, but *much*. Nine out of ten had rather cultivate 500 acres in a ſlovenly manner, though conſtantly cramped for money, than 250 acres completely, though they

would always have money in their pockets. And numerous are the inſtances in which they would be richer at the end of a leaſe of 200 acres, than of 400.—But from whatever ſource this error is derived, the fact, that it is an error, is indiſputable.

Farms are ſometimes hired with ſuch ſmall ſums, that many believe it to be almoſt impoſſible to carry them on: and yet the farmers of ſuch do manage to go on after a manner to the end of the leaſe. Some explanation of this conduct is neceſſary.

Let us ſuppoſe a man to hire a farm of 200 *l.* a year, containing as many acres, 40 of them graſs, and 160 arable: For how ſmall a ſum of money may a farmer hire ſuch an one? *Anſwer*, for 422 *l.*—In this manner:

Implements.

Theſe are all bought in ſecond hand at low prices;	*l.*	*s.*	*d.*
2 Waggons, - - -	15	0	0
2 Carts, - - -	11	0	0
4 Ploughs, - - -	2	5	0
2 Pair of harrows, - -	1	10	0
1 Roller, - - -	0	10	0
Screen, buſhel, forks, rakes, ſhovels, *&c. &c.* - - -	2	10	0
20 Sacks, - - - -	1	5	0
Harneſs for 8 horſes, cart and plough, - - -	4	10	0
Dairy furniture, - - -	2	10	0
Houſehold ditto, - - -	30	0	0
Carry over, £.	71	0	0

Live

Brought over,	£.	71	0	0
Live Stock.				
8 Horſes, - -	£.	45	0	0	
5 Cows, - - -		30	0	0	
50 Sheep (old crones) -		17	10	0	
Swine, - - -		1	10	0	
					94 0 0
Seed.				
40 Acres of wheat, -	£.	24	0	0	
40 Of barley, - -		20	0	0	
10 Of oats and clover, -		7	0	0	
					51 0 0
Labour.				
Three ſervants (wages half a year) which, with himſelf or a ſon, makes one to each plough, - -	£.	10	0	0	
A labourer in harveſt -		2	0	0	
A maid's wages (if he has not a daughter grown up), -		1	10	0	
					13 10 0
Sundry articles.				
I ſuppoſe him to enter the farm at Michaelmas. His cows he will not buy till the winter is over: his horſes he turns into a ſtraw yard, (his own, if he has agreed with his predeceſſor for the ſtraw of the laſt crop) but wherever it may be, at 1 *s.* a week *per* horſe, 5 months, -		8	0	0	
Corn and hay in ſpring ſowing 2 months, at 3 *s.* a week *per* horſe, - -		9	12	0	
Carry over,	£.	17	12	0	229 10 0

Brought over,	£.	17	12	0	229 10 0
Houſe-keeping a year, (beſides what the farm yields) that is, fat hogs and wheat,		40	0	0	
Half a year's rates, &c. at 3 *s.* 6 *d.* in the pound -		17	10	0	
Cloaths and pocket-money, - - -		10	0	0	
					85 2 2
	£.				314 12 0

Thus we find that 314 *l.* 12 *s.* are neceſſary to carry him through the firſt half year, and, in ſome articles, the whole year; conſequently ſo much muſt at firſt be in hand; the further ſum neceſſary will beſt appear from ſtating his expences in half-year accounts.

Second half-year.

To half a year's	*l.*	*s.*	By product of 5	*l.*	*s.*
wages, - -	13	10	Cows, - -	30	0
Ditto rates, -	17	10	Ditto of Sheep, the money doubled, -	35	0
Blackſmith and wheel-wright, a year, - -	12	0	Balance -	81	0
Half a year's rent, - -	100	0			
Window lights,	3	0			
£.	146	0	£.	146	0

By this account we find a deficiency of 81 *l.* which muſt likewiſe be ſupplied by caſh for ſtock at firſt.

Third

Third half-year.

Wages, -	£. 13	10	By 40 acres of wheat at 4*l.*	£. 160	0
Rates, - -	17	10			
Tythe, at 3*s.* in the pound, -	30	0	By 40 of barley at 3*l.* - -	120	0
Black-ſmith and wheel-wright,	10	0	20 Acres turnips ſold, - -	35	0
Rent, - -	100	0			
Lights, - -	3	0			
Seed wheat, 40 acres, - -	24	0			
Ditto 40 of barley, - - -	20	0			
Clover with it, -	3	0			
Ditto 20 acres of beans, - -	12	0			
20 of oats, -	10	0			
80 Sheep, - -	28	0			
Sundry ſmall articles. - -	10	0			
Balance	34	0			
	£. 315	0		£. 315	0

This half-year nothing is reckoned for houſe-keeping: A farmer, when once his land begins to produce, lives off his farm; I mean ſuch an one as takes a farm as large as poſſible; the ſwine furniſh him with meat; the ſcreenings of his wheat with bread, and poultry and other ſmall articles with malt, and the few things he wants beſides.

Fourth half-year.

Rent, -	£. 100	0	By cows, -	£. 30	0
Wages and Labour, - -	15	0	Sheep, - -	56	0
Rates, - - -	17	10	Balance of laſt half-year, -	34	0
Wear and Tear,	14	0	Balance,	26	10
	£. 146	10		£. 146	10

In this half-year we find another deficiency of 26*l.* 10*s.* which, like the former, muſt be carried to the firſt account of ſtock.

Fifth half-year.

Rent,	£. 100	0	By 40 acres of		
Labour,	15	0	wheat,	£. 160	0
Rates,	17	10	40 Of barley,	120	0
Wear and tear,	15	0	20 Of beans,	50	0
Lights,	3	0	10 Of clover, hay		
Tythe,	30	0	and ſeed,	30	0
Seed for 50 acres of wheat,	25	0			
30 Barley,	15	0			
20 Oats,	10	0			
Balance,	129	10			
	£. 360	0		£. 360	0

Sixth half-year.

Rent,	£. 100	0	By Cows,	£. 30	0
Labour,	20	0	Sheep this year		
Rates,	17	10	for ſtock to in-		
Wear and tear,	20	0	creaſe,	0	0
Balance,	2	0	Balance of laſt half year,	129	10
	£. 159	10		£. 159	10

We are now come to the point, when it appears that our farmer may get up the hill with luck, but yet he continues in ſuch a ſituation, that any unforeſeen accident, or failure of crop, will ſit very heavy on him. His general yearly account will now ſtand as under;

Expences.	*l.*	*s.*	Product.	*l.*	*s.*
Rent,	200	0	Wheat,	160	0
Tythe,	30	0	Barley,	120	0
Carry over,	£. 230	0	Carry over,	£. 280	0

Brought over,	£. 230	0	Brought over,	£. 280	0
Wages and labour,	40	0	Beans,	50	0
Rates,	35	0	10 Acres of clover, or turnips,	20	0
Wear and tear,	35	0	Sheep,	100	0
Lights,	3	0	10 Cows, (increaſed to this number)	60	0
Seed for 40 acres of wheat,	20	0			
40 Barley,	20	0			
40 Oats and beans,	20	0			
Sheep,	50	0			
Balance,	57	0			
	£. 510	0		£. 510	0

The balance of 57 *l.* is, for all his private expences, his profit, the intereſt of his money, and the chance of accidents, very inadequate to theſe demands; but, in a term of years, will increaſe, from the expenditure of itſelf in part on the farm, and from the gradual increaſe of ſtock by breeding, as he has, beſides the article of ſheep charged, 56 *l.* worth for breeding, either in kind or caſh. Now if we go over theſe accounts, the ſums wherewith the farm was ſtocked will appear to be as follow:

The firſt expence,	£. 314	12	0
The firſt wrong balance,	81	0	0
The ſecond ditto,	26	10	0
Total,	£. 422	2	0

Which is little more than two rents.

This ſketch, in which a minute accuracy was not neceſſary, will ſerve to ſhew the management whereby farmers ſometimes, with very ſmall ſums of money, get into large farms; and it proves, at the ſame time, (notwithſtanding the poſſibility of ſucceeding in ſuch attempts), that the ma-

naging in this manner is very hazardous to the farmer, and pernicious to the farm.

If a bad year comes, or any accidents happen to his ſtock, he is ruined:—With good years he can afford to do nothing in the way of improvement;—and he is ſo weak in cattle and labour, that, in a few years, his fields muſt inevitably be out of order for want of requiſite tillage; and better horſes muſt be bought, and more men employed, or all will go to ruin.—His implements, bought in with an eye to cheapneſs alone, will ſoon be worn out, and freſh ſupplies demanded. —All expences will multiply.

In ſuch a ſtate, how is it poſſible he ſhould turn his land to the beſt advantage? A vein of the fineſt marle may be under his fields; he can have nothing to ſay to it. He may be within 3 or 4 miles of a town, where dung and aſhes are to be had on very reaſonable terms; but how is he to afford the purchaſe?—— Nothing can be clearer than the infinite diſadvantages of ſuch a confined ſituation.

It would be abſurd to take any trouble to point out how farms ſhould be ſtocked that are hired on theſe principles; ſuch a deſign would be even pernicious; the reader muſt not, therefore, expect in the enſuing calculations that I aim the leaſt at enabling him to play the ſloven. I ſhall ſuppoſe him deſirous of laying out his fortune in agriculture to the beſt advantage; which certainly muſt be upon the principles of *good*, not *bad* huſbandry.

The inſtance I have given above, is a remarkable one; it muſt not be ſuppoſed that a great many farms of 200*l.* a year, are ſtocked with little more than 400*l.* but inſtances of very bad management in this reſpect are abundant, though not ſo execrable as this.——In general, moſt farmers

mers will be found very faulty, and partaking more or leſs of this ſpirit of avarice.

When a man is in ſearch of a farm, he ſhould be deſirous alone of employing his money to the beſt advantage: What is it to him, whether on 200 acres or 2000? That quantity of land which to his ſum of money is moſt profitable, is the quantity to be deſired.

One point cannot be attended to too much, which is, that the farmer be clear in the ſum he poſſeſſes, and not, on any account, in doubt, or depending for any on accidents. It is common for farmers to be deſirous, when they change their farms, of moving into one in the neighbourhood; that they may not be at the loſs of ſelling their old ſtock, and buying freſh; but this is a moſt pernicious circumſtance, and leads numbers to their ruin.

When a farmer acts on this plan, (I am here ſuppoſing him not to be a rich man, but in moderate circumſtances, and dependant every year, ſomewhat on the laſt), he, in common with others, aims at as large a farm as he can graſp; but the peculiar miſchief here is, he reckons his acres of corn upon the ground, and the general produce of his farm the laſt year, as ſo much money (by calculation) towards ſtocking the new one, which he moves into directly: Now, upon entering into any trade or buſineſs whatever, the great point is to know to a ſhilling the amount of a man's fortune, to reckon at ſo critical a moment nothing upon contingencies, but have the ſatisfaction, as well as neceſſary accuracy, in knowing exactly the amount of his dependences.

If he moves directly out of one farm into another, this cannot be the caſe; for it muſt be hired ſome time before he leaves his old one; or,

or, in other words, while his laſt year's crop is on the ground. Now I would earneſtly adviſe all in ſuch a ſituation, not even to look at a new farm, 'till the whole product of their old one is converted into money. He then knows exactly what he has to depend upon, and can form a much more accurate judgment of the quantity of land proper for him to hire, than while he reckons his crops as money, before they are reaped.

Corn is ſometimes very deceitful; a man, in eſtimating the product, may eaſily be miſtaken greatly: A very bad harveſt, a blight, a mildew, an hundred things, may leſſen the value greatly, and markets ſink unexpectedly. He finds his product much leſs than he valued it; but his new farm is hired, and he cannot withdraw the engagement, nor manage it with leſs money. —— Is not the ruin of ſuch a ſituation ſufficiently evident?

CHAP.

CHAP. XV.

Of the moſt advantageous method of diſpoſing of 50 l. in farming.

I Dedicate this chapter to the ſervice of the ſervant, labourer, and other poor men, who, ſaving or acquiring a ſmall ſum of money, are deſirous to become farmers: But it is impoſſible, in the title of this or any of the ſucceeding chapters, to ſpecify minutely the ſum which will be proved in the calculations; when I ſay 50 *l.* I mean only a ſum under or over that. It may vary from 35 *l.* to 65 *l.* nor is there any thing inaccurate or uſeleſs in ſuch want of previous limitations. It is more genuine to reject them, and ſhews that the eſtimates are not warped to anſwer preciſely a given point, but either extended or diminiſhed, according to the circumſtances of the farm.

I muſt farther be allowed to premiſe, that I aim, in all things, at eſtimations of good huſbandry; conſequently, bad farmers muſt not quarrel with me for not ſquaring my ideas to their practice.

In all the preceding parts of this inquiry, gentlemen and common farmers have been upon the ſame footing; it would only have multiplied diviſions for nothing, to have made any diſtinctions between them: But in the article of ſtocking, it is very different; a gentleman, as I ſhall ſhew hereafter, muſt, in moſt caſes, aſſign more money to any given purpoſe, than a common farmer: — I ſhall not, however, make any diſtinction between them, while I ſpeak only of *little* farms, ſince gentlemen can have nothing to do with ſuch but through curioſity; never for profit:

And

And as to farms of pleaſure, *viz.* experimental ones, I ſhall treat ſingly of them hereafter. When I come to middling and large farms, I ſhall make diſtinctions between theſe claſſes.

Little farms muſt be on rich ſoils, or at leaſt ſuch as require no improvement. There are variations in theſe, which muſt have various calculations.

N° 1.

Diviſion of 50l. in the ſtock, &c. of a farm half graſs and half arable, on a clay or loam ſoil.

Rent, &c.

	£.		
Rent of 16 acres of land, -	16	16	0
Tythe at 4*s.* in the pound, -	3	7	2
Rates of all ſorts, and ſtatute work, 4*s.* in the pound, - -	3	7	2
	£. 23	10	4

Implements, &c.

	£.			*l.*	*s.*	*d.*
A cart with ladders, -	8	0	0			
A plough, - -	1	11	6			
A pair of harrows, -	1	10	0			
A barley roller, - -	1	10	0			
Cart and plough harneſs for 2 horſes, - -	2	2	0			
A ſcreen, a buſhel, a fan, ſieves, forks, rakes, a ſhovel, ſpade, pick-axe, ſcythe, *&c. &c.* - -	1	10	0			
Ten ſacks, - - -	1	5	0			
Dairy furniture, - -	0	10	0			
				17	18	6
Carry over, £.				17	18	6

Brought over, £. 17 18 6

Live ſtock.

Two horſes, -	£. 16	0	0
Four cows, - -	20	0	0
A ſow, - - -	0	15	0
			36 15 0

Seed and tillage.

Paid the preceding tenant for three acres of wheat, ploughed thrice, at 4*s.* -	1	16	0
Seed, - - -	1	16	0
Sowing, - - -	0	1	6
Water furrowing, -	0	3	0
One ploughing for 3 acres of oats, - -	0	12	0
Seed, - - -	1	10	0
Sowing, - -	0	0	9
Water furrowing and harrowing, - -	0	1	6
			2 8 9

Sundry articles.

Wear and tear, and ſhoeing a year, - -	£. 2	0	0
Houſe-keeping and cloaths a year, beſides what the garden and farm yields, ſuppoſe a man, his wife, and 4 children, and alſo beſides what the wife and children earn, - - -	5	0	0
			7 0 0
			£. 67 14 3

Thus the reader finds I have run up a calculation to above 67 *l.* and under the *title* of 50 *l.* but

but I know not, in huſbandry, a leſs farm than this, to have part of it arable, that can poſſibly be ſuppoſed to anſwer in the leaſt to the farmer. But, before I proceed, I muſt make a few obſervations on ſome of the preceding articles.

Implements.

Some of theſe I allow ſo little a farmer to buy ſecond-hand, but not to hunt out at a ſale for the *cheapeſt* ſort, which are ſo often the deareſt in the end. The cart new would have come to 12 *l.* the barley roller 2 *l.* or 2 *l.* 5 *s.* the harneſs to 3 *l.* or 4 *l.* the miſcellaneous articles to 2 *l.* or 2 *l.* 5 *s.* but I ſuppoſe him to be poſſeſſed of a ſpade, pick-axe and ſcythe. The ſacks, plough and harrows I do not allow him to buy ſecond-hand at all.

Live ſtock.

Such a farmer as this, in common, would get the two horſes perhaps for 5 *l.* or 6 *l.* but ſuch ſtocking is nothing but ruin; dog horſes eat as much as good ones, but will by no means do their work. With ſuch a pair of horſes as I allow him, he may, in caſe he has an opportunity, and it does not interfere with his own work, do ſome ploughing for any neighbouring gentleman or farmer that will employ him; if he and his team can earn 4 or 5 *s.* a day, now and then, it will be an advantage; but ſuch as he could never gain with 50 *s.* horſes.

Four cows to 8 acres of land (with 2 horſes) is a large allowance, but he muſt have a good ſtock, or he can never live at all; beſides, he may feed his horſes in a good meaſure with an acre or two of clover, which he may eaſily manage in a year or two.

Seed

Seed and tillage.

In this farm, and all the ſucceeding ones, I ſuppoſe the farm entered at *Lady-day*, and the preceding tenant paid for both the *Michaelmas* and ſpring crops: and this method I chuſe preferably to any other; becauſe it will anſwer the entering both at *Lady-day* and *Michaelmas*. If it is the latter, the expences are, perhaps, the ſame, only paid in horſe keeping, inſtead of *per* acre to the farmer.

This little farmer's yearly account will ſtand thus:

Expences.	*l.*	*s.*	*d.*
Rent,	16	16	0
Tythe,	3	7	2
Town charges,	3	7	2
Seed for 3 acres of wheat,	1	16	0
Ditto for 3 of oats,	1	10	0
Wear and tear,	2	0	0
Houſe-keeping, &c.	5	0	0
£.	33	16	4

Produce.			
3 Acres of wheat,	12	0	0
4 Cows,	20	0	0
	32	0	0
Expences,	33	16	4
Product,	32	0	0
Deficiency,	1	16	4
Intereſt of the ſtock,	4	11	0
Loſs,	6	7	4

This

This will not run him in debt, nor perhaps diſtreſs him, becauſe he may diſcharge it, either by ſelling a hog now and then, breeding up a calf, or earning a little money with his horſes and cart, or plough; and theſe articles will probably amount to more than the deficiency, and leave him ſomething that *may* be called profit.

It muſt be remarked, that 4 *l. per* acre of wheat, on an average, is a large produce, and beyond what is gained by moſt little farmers; and 5 *l.* a cow is not a low eſtimation. The reaſon that I allow ſuch ſums, is the ſurplus of time upon the farmer's hands, beſides what is *requiſite* for the common tillage of his 8 acres; which time I ſuppoſe him to beſtow upon his land in ſummer, in ploughing it much oftener than common, and in both ſummer and winter in carting earth and ditch ſtuff unto it. He will have ſufficient time to make good and deep ditches throughout his farm, and alſo to cart away the earth that comes out of them. By theſe means I ſuppoſe him to get better crops than common with little farmers; and his graſs may be managed in the ſame manner.

His whole time will not, however, be taken up; we may ſuppoſe him to go to day-labour a third part of the year, and earn 8 *l.* In that caſe the account will be thus:

Labour,	£. 8	0	0
Deficiency,	6	7	4
	£. 1	12	8

Which will be all he has to anſwer the ſavings while he was a labourer, which muſt be oppoſed to the accidental produce of a pig, a calf, or work with his horſes.

Now, ſuppoſing that the farm in one caſe maintains him, and the labour, in the other; ſo

ſo far they are upon a par. But the labour is liable to no chances nor accidents; the farm to many.

It is very evident, therefore, that a labourer, poſſeſſed of 91 *l.* taking ſuch a farm, is acting not only with imprudence, but even folly, and much to his prejudice.

N° 2.

Variation the firſt.

The arable part of the above farm to be laid down to graſs.

Firſt year.

All expences the ſame as before, -	£. 91	4	7

Second year.

Sundry articles of expence, except that of ſeed, - - -	30	10	4
Seed of eight acres of oats, -	4	0	0
Graſs ſeeds for ditto, - -	12	0	0
£.	46	10	4

Produce.

5 Acres of oats, - -	15	0	0
4 Cows, - - -	20	0	0
	35	0	0
Expences, - - -	46	10	4
Produce, - - -	35	0	0
Deficiency, - - -	11	10	4
Original ſum, - - -	91	4	7
Total, £.	102	14	11

Which total it is neceſſary, at firſt, to be poſſeſſed of, when the plan is reducing the whole

farm to graſs. When once the eight acres of oats are in the ground, he may ſell ſome of his ſtock, and with the produce purchaſe more cows. For inſtance,

	£.			l.	s.	d.
Plough, - -	1	11	6			
Harrows, - -	1	10	0			
Roller, - - -	1	10	0			
Harneſs for 3 horſes, -	1	10	0			
Sundries, - -	1	10	0			
Sacks, - -	1	5	0			
One horſe, * - -	8	0	0			
	£. 16	16	6			
Which may be ſold for				12	0	0

Which 12*l.* will purchaſe two cows and a young heifer. When the farm is in this ſituation, the annual account will ſtand thus:

	l.	s.	d.
Rent, tythe, and town charges, -	23	10	4
Shoeing of horſe, and wear of the cart,	0	15	0
Houſe-keeping, &c. - -	5	0	0
£.	29	5	4
Produce.			
6 Cows, - - -	30	0	0
Profit on breeding a heifer conſtantly,	1	0	0
	31	0	0
Expences, - - -	29	5	4
Profit on the farm, - - £.	1	14	8

But, as it is all graſs, and conſequently very little labour required

Carry over, £. 1 14 8

* The horſe muſt earn ſomething, in being let, or ſome other way; for it will not anſwer to keep him all the year for the farm alone.

for

Brought over,	£. 1	14	8
for it, he may do his ditches well, and carry the earth unto the land, and yet have full half the year to go to labour, and conſequently we muſt charge half a year; we will call it, -	12	0	0
	13	14	8
Deduct the intereſt of the ſtock, -	5	2	0
Clear profit, - -	£. 8	12	8

Upon this account, one remark of great conſequence is, the vaſt ſuperiority of the graſs farm, which ought to be a leſſon to people who want little farms, to concern themſelves with arable land; for it deprives them of all profit, and at the ſame time lays them open to great and numerous loſſes.

N° 3.

Variation the ſecond.

Diviſion of 50*l.* &c. *in a graſs farm, the ſoil clay or loam.*

Rent, &c.

				l.	*s.*	*d.*
Rent of 12 acres of graſs land at 25*s.* -	£. 15	0	0			
Tythe, at 4*s.* - -	3	0	0			
Rates, &c. at 4*s.* - -	3	0	0			
				21	0	0

Implements.

A cart, - -	8	0	0			
Forks, ſcythes, rakes, &c. &c.	0	10	0			
Dairy furniture, -	0	10	0			
Harneſs, - - -	0	15	0			
				9	15	0
Carry over,				£. 30	15	0

Brought over,	£.	30	15 0

Live ſtock.

One horſe,	£. 8	0	0
4 cows,	20	0	0
A ſow,	0	15	0
		28	15 0

Sundry articles.

Shoeing and wear of cart	0	15	0
Houſe-keeping, &c.	5	0	0
		5	15 0
	£.	65	5 0

The annual account of this farm will be as follows:

Expences.

Rent, &c.	£. 21	0	0
Sundry articles,	5	15	0
	26	15	0

Produce.

Four cows,	20	0	0
Three quarters of a year's labour,	18	0	0
	38	0	0
Expences,	26	15	0
Profit,	11	5	0
Intereſt of the ſtock,	3	5	0
Clear profit,	£. 8	0	0

In theſe accounts 5 *l.* the wife and childrens earnings, and the farm (beſides the ſtated produce) in the articles of ſwine, garden, milk, &c. are ſuppoſed to maintain the whole family, and I believe the calculation is not at all ſtretched.

And,

And, according to this account, he apparently is the better for his farm by 8 *l.* a year, and at the ſame time liable to no loſſes by bad crops: I ſay *apparently*, becauſe it is not totally ſo, as we may ſuppoſe him, before he took the farm, to ſave ſomething annually, which enabled him to hire it; conſequently that ſaving ſhould be deducted before the remainder is called the profit of the farm; but the amount of this ſaving will not admit of calculation.

I ſhall not extend theſe variations farther, as ſuch very ſmall farms will not admit near ſo many as larger ones.

It is obvious, from theſe few, that a labourer is a poorer man after he hires a farm that requires a plough to move, than while he depends only on his labour; but with a farm all graſs, the caſe is different; it anſwers to ſuch an one to hire a farm partly arable, to lay it down to graſs; but it appears to be much the moſt profitable, notwithſtanding the ſuperiority of rent, to hire one that is all graſs, which may alſo be done for leſs money than an arable one.

CHAP. XVI.

Of the moſt advantageous method of diſpoſing of 100 *l. in farming.*

MANY obſervations uſed in the preceding chapter are equally applicable to this: we are yet in the region of little farms.

N° 1.

Diviſion of 100 *l. in ſtocking a farm all arable, the ſoil clay or loam.*

Rent, &c.

					l.	*s.*	*d.*
Rent of 25 acres at 1 *l.* 1 *s.* *per* acre, -	£.	26	5	0			
Tythe, at 4 *s.* -		5	4	0			
Town charges at 4 *s.* -		5	4	0			
					36	13	0

Implements.

A cart, - - -	£.	8	0	0			
A plough, - -		1	11	6			
A pair of harrows, -		1	10	0			
A barley roller, -		1	10	0			
Cart and plough harneſs for 2 horſes, -		2	2	0			
Screen, buſhel, &c. &c.		1	10	0			
Ten ſacks, - -		1	5	0			
					17	8	6

Live ſtock.

2 Horſes, -	£.	16	0	0			
1 Cow, - -		5	0	0			
A Sow, - -		0	15	0			
					21	15	0
Carry over,	£.				75	16	6

Brought over, £. 75 16 6

Seed and tillage.

Paid the preceding tenant, for ploughing 8 acres 4 times, at 4s.	-	£.	6	8	0
Wheat ſeed, for ditto	-		4	16	0
Sowing,	- -		0	4	0
Water-furrowing,	-		0	8	0
Ploughing 5 acres twice,			2	0	0
Barley-ſeed for ditto,	-		2	10	0
Sowing,	- -		0	1	3
Water-furrowing,	-		0	2	6
Clover-ſeed, with ditto,	-		1	0	0
Sowing,	- -		0	1	3
Ploughing 3 acres once,	-		0	12	0
Oat-ſeed for ditto,	-		1	10	0
Sowing,	- -		0	0	9
Water-furrowing,	-		0	1	6
				19	15 3

Sundry articles.

Shoeing, and wear and tear,	- -	£	3	10	0
Houſe-keeping, cloaths, &c. beſides the aſſiſtance of the farm, and the earnings of the wife and family,			5	0	0
				8	10 0
		£.		104	1 9

Under the article *ſeed and tillage*, I ſtate 8 acres of wheat, 5 of barley, and 3 of oats; which, on loams and clays, will form no bad courſe of crops; that is, one third wheat, one third ſpring corn, and the other third fallow and clover. Inſtead of barley, it will be an advan-

tage ſometimes to ſubſtitute beans. The annual account of this farm will ſtand as follows.

Expences.

Rent, &c. - -	£, 37	13	0
Seed for 8 acres of wheat, -	4	16	0
Ditto for 5 acres of barley, or beans	2	10	0
Ditto for 3 acres of oats, - -	1	10	0
Wear and tear, - -	3	10	0
Houſe-keeping, &c. - -	5	0	0
£.	54	19	0

Produce.

8 Acres of wheat, - -	32	0	0
5 of ſpring corn, - -	15	0	0
One cow, - - -	5	0	0
£.	52	0	0

Expences, - -	54	19	0
Produce, - - -	52	0	0
Deficiency, - - £.	2	19	0

This deficiency muſt be ſupplied by working for others with his team, or ſome other method *; but not by his own labour, as this farm will not allow of ſpare time enough for that.

Now as he maintained himſelf by his labour before, and ſaved ſomething beſides; and, as he does no more than maintain himſelf after he is a farmer, without ſecurity from misfortunes of bad

* He may (if he can get them) take ſome cattle in to joiſt on ſtraw, as he will have enough for that purpoſe. But this, being an uncertainty, muſt not be carried to account.

crops;

crops; it is extremely evident, that he loſes the intereſt of his money by turning farmer.

But as all contingencies are hazardous, the loſs attending this farm is beſt ſtated thus:

Deficiency, - -	£. 2	19 0
Intereſt of ſtock, - - -	5	7 0
Total loſs,	£. 8	6 0

N° 2.

Variation the firſt.

The ſame farm half arable and half graſs.

Rent, &c. - - -			£. 37	13 0
Implements, - - -			17	8 6
Live ſtock, 2 horſes,	16	0 0		
A ſow, - -	0	15 0		
5 Cows, - -	25	0 0		
			41	15 0
			£. 96	16 6

Seed and tillage.

Ploughing 4 acres of wheat, -	£. 3	4	0
Seed, - -	2	8	0
Sowing, - -	0	2	0
Water-furrowing, -	0	4	0
Ploughing 1 acre barley	0	8	0
Seed, - -	0	10	0
Sowing, - -	0	0	3
Water-furrowing, -	0	0	6
Ploughing 3 acres once for oats, - -	0	12	0
Seed, - -	1	10	0
Sowing, - -	0	0	9
Water-furrowing, -	0	1	6
		9	1 0
Carry over,	£. 105	17	6

Brought over,	£. 105	17	6
Wear and tear, - -	3	0	0
Houſe-keeping, &c. - -	5	0	0
	113	17	6
Dairy furniture, - -	0	10	0
£.	114	7	6

The annual account of this farm will be as follows:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	37	13	0
Seed for 4 acres of wheat, -	2	8	0
Ditto for 5 * of ſpring corn, -	2	10	0
Wear and tear, - -	3	0	0
Houſe-keeping, &c. - -	5	0	0
£.	50	11	0

Produce.			
4 Acres of wheat, - -	16	0	0
2 Ditto of barley or beans, -	6	0	0
5 Cows, - - -	25	0	0
The arable part of this farm will allow him to abſent himſelf at labour about $\frac{1}{4}$ of a year; we may therefore add, - -	6	0	0
	53	0	0
Expences, - -	50	11	0
Profit, - - - -	2	9	0

* After the land is in tolerable order, wholly fallowing $3\frac{1}{2}$ acres will be ſufficient.

Intereſt

Intereſt of the ſtock,	£. 5	14	0
Profit,	2	9	0
Loſs,	£. 3	5	0

The loſs remaining upon either of theſe farms, is not probably the whole amount of their miſchievous effects, as the farmer muſt be ſuppoſed to have ſaved ſomething annually, before he hired either.

N° 3.

Variation the ſecond.

The ſame farm all graſs.

Rent, at 25 *s.*	£. 30	0	0
Tythe, at 4 *s.*	6	0	0
Rates, at 4 *s.*	6	0	0
	£. 42	0	0

Implements.

A cart,	£. 8	0	0		
Harneſs for 1 horſe,	0	15	0		
Sundry ſmall articles,	0	10	0		
				9	5	0
			£.	51	5	0

Live ſtock.

1 Horſe,	£. 8	0	0		
1 Sow,	0	15	0		
8 Cows,	40	0	0		
			48	15	0
Shoeing, and wear of cart,			0	17	0
Dairy furniture,			1	10	0
Houſe-keeping, &c.			5	0	0
		£.	107	7	0

The

The annual account will be:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	42	0	0
Shoeing and wear, - -	0	17	0
Houſe-keeping, &c. - -	5	0	0
£.	47	17	0

Produce.	*l.*	*s.*	*d.*
8 Cows, - - -	40	0	0
Swine ſold, and profit on two heifers always breeding, - - -	2	0	0
Three fourths of the year's labour,	18	0	0
£.	60	0	0
Expences, - - -	47	17	0
Profit, - - -	12	3	0
Intereſt of the ſtock, - -	5	7	0
Clear profit, - - £.	6	16	0

This profit is conſiderable, and makes it anſwer to take the farm; which will always be the caſe with graſs ones, let the quantity of land be what it may. The article of the two heifers and ſwine charged here is this: I ſuppoſe that 8 Cows, to maintain hogs, more than ſufficient for the family; ſome are ſold; and I likewiſe ſuppoſe two heifers always to be kept of his own breeding, the *profit* upon which, and the ſwine ſold, to amount to 2 *l.*

I think, (conſidering the rent) I do not exaggerate in ſuppoſing 8 cows, 2 young cattle, and 1 horſe kept on 25 acres of graſs; but, if the horſe is put out to ſtraw in the winter, he may certainly (and ought) more than pay it, in being let out at leiſure times.

N° 4.

N° 4.

Variation the third.

The ſame all arable, on a ſoil light enough for turnips.

	l.	s.	d.
Rent, &c. as before, - -	37	13	0
Implements, ditto, - -	17	8	6
Live ſtock, ditto, - -	21	15	0
Add 2 more cows, - -	10	0	0

Seed and tillage.

	£.					
6 Acres of wheat, 4 earths,	£. 4	16	0			
Seed, - -	3	12	0			
Sowing, - -	0	3	0			
6 Acres of ſpring corn, 2 earths, - -	2	8	0			
Seed, - -	3	0	0			
Sowing, - -	0	1	6			
Clover ſeed, with ditto, -	1	4	0			
				15	4	6
Shoeing, wear and tear, and houſe-keeping, as before, -				8	10	0
				£. 110	11	0

The courſe of crops moſt beneficial for this farm, when it is large enough to maintain a ſtock of ſheep, is, 1. turnips; 2. barley; 3 clover; 4. wheat.—But as ſuch a farm as this will not allow of ſheep, ſome other ameliorating crop muſt be ſubſtituted in their room, but not wholly, as an acre or two will be of uſe to the farmer, divide the employment of the year into different ſeaſons, and throw him in the way of ſelling them (to be fed off the land) in a dear year, to advantage. We will therefore ſuppoſe him to raiſe 2 acres every year; the other 4 acres may be dedicated to white boiling peaſe, which will prepare the land for barley and oats; and, if they

are well hoed, will prove not ſo uncertain a crop as when left to themſelves. We will therefore ſuppoſe the annual account of this farm as follows:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	37	13	0
Seed for 6 acres of wheat, -	3	12	0
Ditto for 6 ditto of barley and oats,	3	0	0
Ditto for 6 acres of clover, -	1	4	0
Ditto 4 of peaſe, - -	2	0	0
Ditto 2 of turnips, - -	0	1	0
Shoeing, &c. and houſe-keeping, &c.	8	10	0
£.	56	0	0

Produce.	*l.*	*s.*	*d.*
6 Acres of wheat, - -	24	0	0
3 Of barley, - -	9	0	0
4 Of peaſe, - -	10	0	0
2 Of turnips, - -	3	10	0
3 Cows, - - - -	15	0	0
£.	61	10	0
Expences, - - -	56	0	0
Profit, - - - -	5	10	0
Intereſt of the ſtock, - -	5	10	0

This product is as large as I can allow. The peaſe certainly ought not to be reckoned equal to barley; and the turnips at 35 *s.* to be fed off, is a good price, upon an average, in countries where the culture is common. Nor is it any way below the mark to keep 3 cows and 2 horſes principally on 6 acres of clover: —— Add to all this, that the farmer will not have an hour to ſpare to work for others; this farm will employ him conſtantly, and he muſt work like an horſe to do it.

After

After all, the loſs remaining, amounts to the intereſt of his money. Can any thing prove ſtronger the unprofitableneſs of ſuch a farm? It is uſeleſs to vary this quantity to $\frac{1}{4}$ graſs and $\frac{1}{2}$ arable; and, to all graſs, the proportion will remain, and it would at laſt be found that all arable is the only mode in which it would pay; and the account varies not at all from the laſt of the clay and loam.

If ſeeking ſuch proportions of arable and graſs (and other points) as would preciſely keep the man and horſes in regular and profitable employment, could be anſwered in a farm to be ſtocked by 100*l.* the variations ſhould be extended; but there is no ſuch thing. A much larger capital is requiſite to keep even 2 horſes conſtantly at work, ſo as they ſhall not ſtop for want of the man, nor the man for the want of the horſes.

Recapitulation.

Demanding the moſt advantageous method of diſpoſing 100*l.* in farming, the anſwers are:

	l.	*s.*	*d.*
An arable clay or loam farm, of 25 acres, is attended with the loſs of the intereſt of - - -	8	6	0
Ditto, half arable and half graſs, -	3	5	0
Ditto, all graſs, profit, - -	6	16	0
Ditto, all arable, ſoil light enough for turnips, neither profit nor loſs, - - -	0	0	0

It is very evident, from this ſtate of the caſe, that the loſs is almoſt in proportion to the quantity of arable land: The variation in the turnip-land farm is an exception, but then it muſt be remembered, the occupier of that muſt work like an horſe; and keep all his land cropped; conſequently the greater breadth of land he depends

on,

on, the worſe his chance in reſpect of accidents, while all is worked with one pair of hands.

The perſon, therefore, who has an hundred pounds to diſpoſe of in huſbandry, ſhould firſt ſeek 25 acres of land, or thereabouts, all graſs, that being the moſt advantageous farm for him of all others.

Next, he ſhould chuſe the ſame quantity of a ſoil light enough for turnips all arable.

Next he ſhould aim at the ſame ſized farm, the ſoil clay or loam, half arable land and half graſs.

And, laſtly, he ſhould hire one all arable, the ſoil clay or loam.

Nor ſhould the reader be ſurprized at three out of four of theſe farms proving unprofitable: I am confident more than that proportion, of ſuch real farms, are a loſs to their occupiers. But the error, in the common notions of this caſe, reſults from not bringing the value of the farmer's own labour, and the intereſt of his money, to account. Suppoſe a man earns 25 *l.* a year in day-labour, out of which he ſaves 100 *l.* to hire a little farm: This 100 *l.* brings him in 5 *l.* a year: So that his condition, at the time of hiring his farm, is a maintenance, and a capability of laying up a ſmall ſum annually out of it, and 5 *l.* a year intereſt. If no notice is taken of his ſavings, ſure the farm ought more than to maintain him, and pay the intereſt of his money; if it does not, he is worſe off than before, as his 5 *l.* was then a certainty, and now a contingency. And this account will always prove the pernicious effects of their hiring little farms. But general obſervation will ſhew, that this concluſion is true in every part of the kingdom; for where are more miſerable beings to be met with, than the farmers,

farmers of ſuch little farms as I am now treating of?

The great miſchief is their hiring arable farms, or ſuch as have even one acre to plough. Graſs ones are evidently profitable, and truly beneficial to them; liable to few loſſes and chances againſt them; eaſe of labour, and, in a word, a ſure ſtep, with tolerable induſtry, to get into larger farms, and to riſe by degrees to a good fortune. The profit of 6 *l.* 16 *s.* a year, on one of theſe, is conſiderable, and would preſently accumulate to a ſum conſiderable enough to hire a farm of 50 or 60 acres of land. Whence, therefore, comes the infatuation ſo common among theſe people, to think themſelves no farmers till they get a plough? the only implement that can in any caſe enſure their ruin. —— It is much to be regretted, that landlords will let ſuch ſmall arable farms; the expence of laying them down to graſs would be trifling, and then they would prove highly beneficial to the poor people, and to themſelves alſo.

CHAP. XVII.

Of the moſt advantageous method of diſpoſing of any ſum from 150 *l. to* 200 *l. in farming.*

IT is neceſſary to examine all ſorts of ſmall farms accurately, for a reaſon which does not hold with larger ones. The little farmer muſt be ſuppoſed to have no credit; conſequently, he muſt be the more cautious not to hire an acre more than he can manage to advantage, as ſuch an imprudence cannot be afterwards remedied by applying for a loan to any one. But a larger farmer may eaſily be ſuppoſed to have *ſome* credit; ſo that, if he does rather over-ſhoot the mark, it may not be of ſo bad conſequences. For this reaſon, I dwell among little farms the longer, that the proportions between their money, and the land that is offered to them, may be known with the greater truth.

N° 1.

Diviſion of 150 *l. in ſtocking a farm of* 36 *acres of clay or loam, all arable.*

Rent, &c.			*l.*	*s.*	*d.*
Rent of 36 acres, at 1 *l.* 1 *s.* - -	£. 37	16 0			
Tythe, at 4 *s.* -	6	6 0			
Rates, &c. at 4 *s.* -	6	6 0			
			50	8	0
Implements.					
2 Carts, - -	16	0 0			
A plough, - -	1	11 6			
A pair of harrows, -	1	10 0			
Carry over, £.	19	1 6	50	8	0

Brought over, £.	19	1	6	50	8	0
A roller, - -	1	10	0			
Cart and plough harneſs for 2 horſes, - -	2	10	0			
Screen, buſhel, forks, &c. &c. &c. - -	1	12	0			
10 Sacks, - -	1	5	0			
Dairy furniture, -	0	15	0			
				26	13	6

Live ſtock.

2 Horſes, - -	20	0	0			
5 Cows, - -	25	0	0			
A Sow, - -	1	0	0			
				46	0	0

Seed and tillage.

Paid the preceding tenant, for 4 ploughings of 9 acres of wheat land, -	7	4	0			
Seed, - -	5	8	0			
Sowing, - -	0	4	6			
Water-furrowing, -	0	9	0			
Two ploughings of 6 acres of barley land, -	2	8	0			
Seed, - -	3	0	0			
Sowing, - -	0	1	6			
Water-furrowing, -	0	3	0			
One ploughing of 3 acres of oat land, -	0	12	0			
Seed, - -	1	10	0			
Sowing, - -	0	0	9			
Water-furrowing, -	0	1	6			
Seed for 9 acres of clover,	1	16	0			
Sowing, - -	0	2	3			
				23	0	6
Carry over, £.				146	2	0

Brought over,				£.	146 2 0
Labour.					
Aſſiſtance in harveſt. Suppoſe					
Reaping 5 acres of wheat,	£.	1	5 0		
A lad to aſſiſt in carrying in the corn 10 days, at 1 *s.*		0	10 0		
					1 15 0
Sundry articles.					
Shoeing, and wear and tear, - - -		4	0 0		
Houſe-keeping, and cloaths, &c. beſides the aſſiſtance of the farm, and the wife and childrens earnings,		5	0 0		
					9 0 0
				£.	156 17 0

There are ſome variations, in ſeveral of theſe particulars, which it is neceſſary to minute.

Implements.

It may appear odd to ſome, that I ſhould aſſign a farm two carts that keeps but two horſes; but with one the buſineſs, in harveſt and hay time, would go on too ſlowly: the method in which two carts are uſed, with only as many horſes, is this: In harveſt, the ſhocks, or ſtooks of corn, are laid in cluſters when reaped, inſtead of the regular manner of diſpoſing them in rows; and when they are carried, one cart is fixed in the midſt of a cluſter, and loaded by a lad, while the other is drove off with the horſes to the barn; the filler (thill-horſe) being changed of one cart into the other. It is moſt convenient, in carting dung, &c. as there is then no want of moving,

or

or being on the cart to lay the load. This method I have often ſeen uſed in both caſes; but it is only in caſe the field is either at a diſtance from the barn, or a hill is to go up to it; otherwiſe, each horſe draws his cart alone, without changing.

More than two horſes I ſhall not, on any account, allow ſuch a farm as I am now conſidering; if any profit attends it, I am certain it can only ariſe by keeping no more horſes than were before kept on 25 acres, and making them work hard the year round for their living. But I ſhould remark, that, in the common management of little farmers, four horſes are kept to 36 acres of arable land; which is preciſely the reaſon why ſuch farmers are as poor and miſerable as the leaſt of occupiers.

Live ſtock.

The two horſes neceſſary for this farm muſt do more work than thoſe aſſigned to the preceding ones; it is but juſt, therefore, to allow a ſomewhat greater price.

Cows a little farmer ſhould always contrive to keep, although his farm is all arable: theſe muſt ſubſiſt on clover and ſtraw.

Seed and tillage.

Under this head I ſtate the courſe of crops, which it will be moſt advantageous for ſuch a farm to be thrown into; that is, one fourth fallow, a fourth wheat, a fourth ſpring corn, and the remaining fourth clover; by which means half his farm is what may be called fallow every year; and, conſequently, the whole kept in good order, no two crops of corn ever coming together. Beſides which advantage, he will always have a field of clover for his horſes and cows.

Labour.

The ſum I have charged under this head does not include the aſſiſtance he is likewiſe to hire at wheat ſowing, which will amount to a few ſhillings more: the whole will form a ſum very ſmall in the eyes of many; I ſhould, therefore, here explain how one man may cultivate 36 arable acres with ſo little aſſiſtance. Let us take every month in the year from the concluſion of harveſt.

October.	9 acres of wheat ploughed and ſowed, (the ſeeds-man hired), and water-furrowed: This may be called days of work, - - -	15
	9 Acres of laſt year's wheat ſtubble to be ploughed up, - - -	9
		24
November.	Threſhing * 13 qrs of wheat, -	26
December.	Threſhing 9½ qrs. of wheat, -	20
	Ditto 10 qrs. of ſpring corn, - -	5
		25

* Here I make the wheat yield 2½ qrs. *per* acre, and yet charge it only 4 *l.* *per* acre; but ſomething muſt be allowed for the ſcreenings which the farmer uſes in his family (and which are threſhed like the reſt) and alſo on account of all his corn being ſold at home, or at leaſt to a neighbour; — and alſo to the general attention of not cramping him in this Calendar, with charging leſs work than the reality.

January.

January. Ditto 26 qrs of ſpring corn, - 13
Ditching 12 perches, - - - 12
25

February. Ditching 25 perches, - 25

March. Ploughing and ſowing 9 acres of barley and oats, and water-furrowing, - 13
Manuring, - - - 13
26

April. The ſecond ploughing of 9 acres of fallow, - - - - 9
Sundry ſmall articles of work, - 17
26

May. The third ploughing of fallow, - 9
Ditching or manuring, &c. - - 17
26

June. Mowing, making, and carting 2 acres of clover hay, - - - 10
Thiſtling or weeding the 18 acres of corn, 17
27

July. The fourth ploughing of 9 acres of fallow, - - - 9
Mowing, and harveſting 5 acres of ſpring corn, - - - 12
Sundry ſmall articles of work, - 5
26

Auguſt. Reaping 4 acres of wheat, - 10
Harveſting ditto, - - 3
Carry over, 13

Brought over,	13
Mowing and harveſting 4 acres ſpring corn,	10
Sundries, - - -	3
	26

September. Mowing and making, &c. 1 acre of clover hay, - -	6
The fifth ploughing of 9 acres of fallow, throwing it up for the winter, -	9
Chopping, and carting 9 acres of wheat ſtubble, - - -	12
	27

From this Calendar of the year's work, it is extremely evident that one man, with the aſſiſtance I have ſuppoſed, is fully able more than to cultivate, and completely too, 36 acres of arable land. I have in no article pinched him for time; but in moſt allowed him more than a ſufficiency for all ſorts of work, and many weeks for trifling jobs unſpecified.

I come now to the annual account of this farm.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	50	8	0
Seed for 9 acres of wheat, -	5	8	0
Ditto for 9 of ſpring corn, -	4	10	0
Ditto 9 of clover, - - -	1	16	0
Labour, - - - -	1	15	0
Wear and tear, and houſe-keeping, &c.	9	0	0
£.	72	17	0

Produce.

Produce.	*l.*	*s.*	*d.*
9 Acres of wheat, - -	36	0	0
6 Acres of barley, - -	18	0	0
5 Cows, - - - -	25	0	0
	79	0	0
Expences, - - - -	72	17	0
	6	3	0
Intereſt of 156 *l.* - -	7	16	0
Deduct, - - -	6	3	0
Loſs, - - -	£. 1	13	0

N° 2.

Variation the firſt.

The ſame, half graſs and half arable.

Rent, - - - -				£. 50	8 0
Implements the ſame as before, except one cart, - -				18	13 6
Live ſtock.					
2 Horſes, - -	£. 16	0	0		
1 Sow, - -	0	15	0		
7 Cows, - - -	35	0	0		
				51	15 0
Seed and tillage.					
4 Earths of 4½ acres of wheat land, -	£. 3	12	0		
Seed, - -	2	14	0		
Sowing, - -	0	2	3		
Water-furrowing, -	0	4	6		
2 Earths for 4½ acres of barley and beans, -	1	16	0		
Carry over,	£. 8	8	9	120	16 6

Brought over,	£.	8	8	9	120 16	6
Seed, - -		2	5	0		
Sowing, - -		0	1	1½		
Water-furrowing, -		0	2	3		
One earth for 3 acres of oats, - - -		0	12	0		
2 earths of 1½ acre of peaſe or beans, - -		0	12	0		
Seed for 4½, - -		2	5	0		
Sowing, - -		0	1	1½		
Water-furrowing, -		0	2	3		
					14 9	6
Shoeing, wear and tear, and houſe-keeping, - -					8 10	0
	£.				143 16	0

And the annual account will be:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	50	8	0
Seed for 4½ acres of wheat, -	2	14	0
6 Barley, &c. - - -	3	0	0
3 Oats, - - -	1	10	0
Shoeing, wear and tear, &c. -	8	10	0
£.	66	2	0

Produce.			
4½ Acres of wheat, - -	18	0	0
6 Of barley, &c. - -	18	0	0
7 Cows, - - -	35	0	0

To this muſt be added ſome part of his time at labour, which his farm will ſpare; and herein we muſt be guided by the ſame all arable, and not the farms of the preceding chap-

Carry over, £. 71 0 0

ters,

Brought over,	£. 71	0	0
ters, which being conducted on ſome-what different principles, the analogy muſt not be the rule; the proportion of the laſt farm will give to this about a third of the year, or - -	8	0	0
	79	0	0
Expences, - - -	66	2	0
	12	18	0
Deduct intereſt of the ſtock, -	7	3	0
Profit, - - -	£. 5	15	0

N° 3.

Variation the ſecond.

The ſame all graſs, applied to the dairy.

Rent, &c.

Rent of 36 acres, at 25 *s.*	£. 45	0	0		
Tythe, at 4 *s.* - -	9	0	0		
Rates, at 4 *s.* - -	9	0	0		
				63	0	0

Implements.

One cart, - -	8	0	0		
Cart-harneſs, - -	0	15	0		
Rakes, forks, ſcythes, &c.	0	15	0		
Dairy furniture, - -	1	10	0		
				11	0	0

Live Stock.

One horſe, - -	10	0	0		
12 Cows, - -	60	0	0		
2 Sows, - -	1	10	0		
				71	10	0
Carry over,				£. 145	10	0

Brought over,			£.	145	10 0
Sundry articles.					
Shoeing, and wear and tear,	1	0 0			
Houſe-keeping, -	5	0 0			
				6	0 0
			£.	151	10 0

The Annual Account.

Expences.

Rent, &c. - - -	£.	63	0 0
Shoeing, wear and tear, houſe-keeping, &c. - - - - -		6	0 0
		69	0 0

Produce.

12 Cows, - - -		60	0 0
Profit on 5 heifers always breeding,		10	0 0
Swine ſold, - - - -		5	0 0
		75	0 0
Add two thirds of the year's labour,		16	0 0
		91	0 0
Expences, - - -		69	0 0
		22	0 0
Deduct intereſt of the ſtock, -		7	11 0
Clear profit, - -	£.	14	9 0

No one can imagine the product of this farm exaggerated, ſince it is but a trifle more than 40 *s.* an acre, which, from land that rents at 25 *s.* an acre, is very trifling, and much more under the truth than over it.

N° 4.

N° 4.

Variation the third.

The ſame all graſs applied to fatting.

Stock.			*l.*	*s.*	*d.*
Rent, &c. - - - -			63	4	0
Dairy furniture, - - -			0	10	0
Live ſtock.					
1 Cow, - -	5	0 0			
40 Home-bred heifers bought in May, -	120	0 0			
A ſow, - -	0	10 0			
			125	10	0
Houſe-keeping, &c. - -			5	0	0
Horſe and cart hire for ditch earth, -			3	0	0
		£.	197	4	0

This farmer buys neither horſe nor cart, becauſe it will by no means anſwer for the carting of manure alone; the hire is therefore charged. Home-bred heifers of about 3 *l.* each I take to be the moſt profitable branch of ſummer-grazing; but in caſe 40 of them ſhould not eaſily be procured, (which however, is not at all likely), then the number may be made up with ſmall black cattle. The price I calculate them at, I apprehend, is about the average of ſeveral years. I have known them from 40 *s.* to 5 *l.* The cow and the ſow is bought more with an eye to the farmer's houſe-keeping than to the ſtock of the farm. The annual account will ſtand thus:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	63	4	0
40 Heifers, - - -	120	0	0
Carry over, *£.*	183	4	6

Brought over,	£. 183	4	0
Houſe-keeping, &c. - -	5	0	0
Horſe and cart hire, - -	3	0	0
	£. 191	4	0

Produce.

40 Fat heifers ſold in autumn, -	200	0	0
1 Cow, - - - - -	5	0	0
	205	0	0
Four fifths of the year's labour, -	19	4	0
	224	4	0
Expences, - - -	191	4	0
	33	0	0
Deduct intereſt on ſtock, - -	9	17	0
Profit, - - - - - £.	23	3	0

This account calls for ſome very material obſervations. Firſt, there is no common farmer poſſeſſed of 197 *l.* that would hire ſo ſmall a farm as 36 acres of land; and yet we find that ſum is here applied to very profitable uſe in ſtocking ſo ſmall a farm; and the benefit depending on very few contingencies, and liable to no misfortunes of bad crops, &c. &c. &c.

Secondly, we find fatting to be more profitable than dairying, which is a circumſtance of conſequence, and muſt be further examined in future calculations.

Thirdly, the profit here charged I cannot ſuppoſe will be by any one objected to; 40 *s.* not being a conſiderable difference between a lean heifer of 3 *l.* value, and a fat one: I think it can no where be reckoned at leſs when fatted upon land of 25 *s.* an acre. And the aſſigning 40 of them

and

and a cow to 36 ſuch acres, is certainly rather under than over the truth; as I know, in a multiplicity of inſtances, that ſuch land will very well fat two ſuch heifers *per* acre; but one and an half would by moſt have been allowed. But I like to calculate each article in all theſe eſtimates low, to obviate objections.

N° 5.

Variation the fourth.

The ſame all arable, the ſoil light enough for turnips.

Rent, &c. as in N° 1. -	£.	50	8 0
Implements, ditto, - -		26	13 6
Live ſtock, ditto, - - -		46	0 0

Seed and tillage.

4 Earths on nine acres of wheat, - -	£. 7	4	0
Seed, - - -	5	8	0
Sowing, - - -	0	4	6
2 Earths on 6 acres of barley land, - -	2	8	0
Seed, - - -	3	0	0
Sowing, - -	0	1	6
1 Earth on 3 acres of oat land, - -	0	12	0
Seed, - -	1	10	0
Sowing, - -	0	0	9
Seed for 9 acres of clover,	1	16	0
Sowing, - - -	0	2	3
		22	7 0

Labour.

Aſſiſtance in harveſt as in N° 1. - -	1	15	0
Hoeing 2½ acres of turnips twice, - - -	0	15	0
		2	10 0
Carry over, £.	147	18	6

	£.	s.	d.
Brought over,	147	18	6

Sundry articles.

As in N° 1. - - -	9	0	0
£.	156	18	6

The difference of labour in this farm, and that upon the clay, is not ſo great, but, with the above additional aſſiſtance, may be very eaſily executed by one man; for, if the calendar of work I there inſeted be examined, it will be found that the variation is a mere trifle. The other 6½ acres I propoſe ſhould be ſown with white peaſe, and kept clean hoed. The annual account will ſtand thus:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	50	8	0
Seed for 9 acres of wheat, -	5	8	0
Ditto for 9 barley and oats, -	4	10	0
Ditto for 6½ peaſe, - -	3	5	0
Ditto for 9 clover, - -	1	16	0
Ditto for 2½ turnips, - -	0	1	6
Labour, - - -	2	10	0
Shoeing, wear and tear, and houſe-keeping, &c. - -	9	0	0
£.	76	18	6

Produce.

9 Acres of wheat, - -	36	0	0
6 Of barley, - - -	18	0	0
6½ Of peaſe, - - -	16	5	0
2½ Of turnips, - - -	4	7	6
5 Cows, - - -	25	0	0
£.	99	12	6

Produce,

Produce, - - -	£.	99	12 6
Expences, - - -		76	18 6
		22	14 0
Deduct intereſt of ſtock, - -		7	16 0
Profit, - - -	£.	14	18 0

This profit is very conſiderable, and ſhews that arable land is advantageous, as well as graſs, when no more horſes are kept than really neceſſary. If two horſes more are ſuppoſed, and conſequently more labour, where will this 14*l.* be found? And yet ſuch a farm as this is ſcarce ever met with that keeps but two: ſo little knowing are farmers in the very buſineſs of their lives.

But the ſuperiority of this farm to that of the clay ſoil is ſo great, that it ſuggeſts the hint of a new variation, which is an increaſe of crops, by ſubſtituting beans in drills, inſtead of fallow: This I venture to make, as that method in ſowing beans is common in many parts of the kingdom; I mean amongſt *common farmers*; for as to ſuch improvements as are not commonly practiſed, to admit them in theſe eſtimates, would be to extend them to infinity, and at the ſame time, render them uſeleſs to the common huſbandman.

N° 6.

Variation the fifth.

The ſame all arable, the ſoil clay, and beans made the fallow.

The whole article of ſtock will be the ſame as before, or -	£.	156	18 6

Annual Account.

Rent, &c. - - -	£. 50	8	0
Seed, 9 acres wheat, - -	5	8	0
9 Barley and oats, - -	4	10	0
9 Clover, - - -	1	16	0
9 Beans, at 2 buſhels, -	3	12	0
Labour, - - -	1	15	0
Wear and tear, and houſe-keeping, &c.	9	0	0
	£. 76	9	0

Produce.

9 Acres of wheat, - -	36	0	0
6 Of barley, - - -	18	0	0
9 Of beans, - - -	22	10	0
5 Cows, - - -	25	0	0
	£. 101	10	0
Expences, - - -	76	9	0
	25	1	0
Deduct the intereſt of the ſtock, -	7	16	0
Profit, - - -	£. 17	5	0

If the reader turns over the calendar of labour on the farm N° 1. of this chapter, he will find the 9 acres of land now ſown, was, in that farm, ſuppoſed to be fallow, and ploughed five times; now it is certain that, let the beans be ever ſo well cultivated, the labour will not be more; or, at leaſt, a trifle more than the fallow. There is the ſowing, and ploughing between the rows four times, and the harveſt.—But, leſt it is reckoned too large an addition of labour, let us ſtate it again thus:

Profit

Profit before mentioned,	-		£.	17	5	0
Sowing the beans,	-	£. 0 4 6				
Reaping them,	- -	2 5 0				
				2	9	6
Profit by this account,	- -		£.	14	15	6

And here we find that this alteration of cropping renders the heavy ſoil as profitable as the light one — One remark, however, I muſt make; which is, that no one ſhould be too haſty in concluding, that this method of huſbandry, proving very beneficial upon land of a guinea an acre rent, and with four horſe-hoeings between the rows (beſides one hand-hoeing at leaſt), ſhould in the ſame manner be profitable upon a poorer ſoil, and without ſuch culture. Reaſoning by analogy in matters of huſbandry, unleſs the circumſtances are all minutely attended to, will, in numerous inſtances, prove very deluſive.

In the diſpoſition, therefore, of any ſum of money, from 150 *l.* to 200 *l.* theſe farms appear in the following rank of profit.

	l.	*s.*	*d.*
1. Thirty-ſix acres, all graſs, and applied to fatting, which yield, -	23	3	0
2. Ditto all arable, the ſoil light enough for turnips, - -	14	18	0
3. Ditto, all arable, the ſoil clay or loam, and beans, a fallow in the crops, - - - -	14	15	6
4. Ditto, all graſs, and applied to dairying, - - - -	14	9	0
5. Ditto, half graſs and half arable, the ſoil clay, &c. - -	5	15	0
6. Ditto, all arable, the ſoil clay, &c. and the fourth of it a fallow, loſs, - - - -	1	3	0

The firſt is not only ſuperior to the reſt in profit, but alſo in all thoſe chances, which cannot be reduced to calculation;—and, at the ſame time, takes much leſs time, expence and trouble, than a dairy; conſequently the man, poſſeſſed of the ſum requiſite for theſe farms, had much better apply it to that uſe than to any other; and from the following ſketch of the ſums neceſſary to ſtock theſe farms, it appears that the difference between ſeveral of them is ſmall.

N° 1.	The ſtock,	-	-	£.	197	4 0
2.	-	-	-		156	18 6
3.	-	-	-		156	18 6
4.	-	-	-		151	10 0
5.	-	-	-		143	6 0
6.	-	-	-		156	17 0

The following is the intereſt, &c. *per cent.* paid by theſe farms.

N° 1.	-	-	-	£.	16	4 0
2.	-	-	-		14	12 0
3.	-	-	-		15	18 0
4.	-	-	-		14	11 0
5.	-	-	-		9	1 0
6.	-	-	-		3	18 0

Thus we ſee there is not leſs than about 16 *l.* difference in the profit of two farms that require the ſame ſum of money to hire; than which nothing can be a ſtronger proof how very attentive a farmer ſhould be in fixing himſelf in a new farm, and not run headlong, and in the dark, into the firſt that offers; becauſe the taking it will ſave expences of ſome ſort or other, or becauſe it has ſome favourable circumſtances belonging to it.

I apprehend ſuch a ſketch as this will be of uſe in aſſiſting him to form an idea of the farm that will beſt ſuit him; and when once he has gained

gained a juſt notion of that point, his buſineſs is only to find out that farm, among many, which approaches neareſt to it.

The grazing farm, in the above ſketch, from the exceſs of the amount of the ſtock, ſeems to belong rather to another chapter; but it is one of thoſe in which *proportion* holds pretty exactly; ſo that we may conclude from it, that 150*l.* diſpoſed in the ſame manner, will prove proportionably profitable. Such analogy will, however, do in no other caſe, not even the dairying farms: And the quantity of land being the ſame, I am induced to place it here, as the moſt proper place.

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Upon the three preceding chapters it ſhould here be remarked, that there are innumerable variations among ſuch farms, of which no account is here taken. They might be multiplied *ad infinitum*, but neither for the curioſity of the reader, nor the real uſe of the farmer. Such very numerous calculations might, perhaps, ſerve only to perplex.

The differences of ſoil are very great; but, in general, a little farmer ſhould covet that which is extraordinary good, and never grudge a proportionable rent for it; he had better pay even beyond the proportion, than cultivate a ſoil which requires any extraordinary amendments. Indifferent land (I am not ſpeaking of that which is very bad, but in rich countries of 10*s.* 12*s.* 15*s.* an acre) is much more hazardous in the produce; beſides, let him never forget that it coſts him as much to plough, to harrow, to ſow, to reap, &c. &c. a poor acre that yields but 20*s.* produce, as a rich one that yields as many pounds. Rent, compared to this article, is but a trifle.

There are many countries (indeed moſt) in which a plough never ſtirs without four horſes, perhaps five or ſix; and this not at all from neceſſity, but mere cuſtom. We muſt ſuppoſe the farmers of ſuch places to be deeply grounded in their deluſion, and conſequently that *little* farmers were in the ſame predicament; now, the reader has nothing to do but to add to any of the preceding accounts the expence of two or three more horſes, and conſequently of one man (for in ſuch countries every plough has a driver) and let him then diſcover where the profit of any of them is to be found; but let him reverſe the medal, and, I warrant, he will find loſs enough.

It has appeared very plainly that labourers hiring ſeveral of the preceding farms was an injury to them; being much poorer afterwards than before; but to what a degree of miſery would they plunge, if, inſtead of two, they were to keep four horſes? In ſuch countries little farms muſt conſiſt totally of graſs, or there muſt be none at all.—But unhappily ſuch are to be found, to the miſery of many a deluded man, who, ambitious of being a farmer, hurries into ruin.

It is alſo the cuſtom through thoſe parts of the kingdom in which oxen are uſed in draught, never to yoke leſs than 4 to a plough, but much oftener 6 or 8. This is a moſt unprofitable practice, and totally uſeleſs; for a yoke of good oxen will plough an acre of land in a day, as well as a pair of horſes. — However, while 4 are neceſſary, it effectually precludes ſuch ſmall farms as I am now ſpeaking of; as the farmer can no more afford to keep 4 oxen for draught, than he can 4 horſes.

Theſe eſtimates muſt therefore undoubtedly be underſtood to concern only *ſuch countries* as uſe a pair of horſes in a plough and no driver; and,

and, in other countries, only *ſuch men* as have the ſenſe and ſpirit to act contrary to ſuch ridiculous cuſtoms.

I have in eſtimating the ſtock of theſe farms ſtated the ſums neceſſary to carry the farmer through one year, which in ſmall farms will, in moſt caſes, be ſufficient; nor do I think it can be effectually done for leſs.

There are ſome minute variations in theſe accounts, which are too numerous to explain each ſeparately, but I do not think any can be found, which an attention to all the circumſtances of the farm will not at once throw into a proper light. All that ariſe from rent, tythe and rates may be altered according to circumſtances in a few minutes: Such are too numerous to be varied here.

CHAP. XVIII.

Of the moſt advantageous method, on farms of 40 or 50 acres, of diſpoſing of from 200 l. to 300 l. in farming.

I Muſt claim the ſame latitude in this as in the preceding chapters; not to be tied abſolutely to the above ſum: I fix on one as ſomething of a mark to guide me by; not that there is any more uſe in a calculation for that ſum, than in any other which may ariſe, as a man is as likely to have 237 *l.* for inſtance, to diſpoſe of, as 250 *l.*

N° 1.

Diviſion of 250 l. in ſtocking a farm of 50 acres, all arable, the ſoil clay or loam, and beans reckoned a fallow.

Rent, &c.				*l.*	*s.*	*d.*
Rent of 50 acres at 1 *l.*	£. 50	0	0			
Tythe, at 4 *s.* - -	10	0	0			
Rates, &c. at 4 *s.* - -	10	0	0			
				70	0	0

Implements.						
2 Carts, - -	£. 16	0	0			
Plough, - -	1	11	6			
Harrows, - -	2	0	0			
Roller, - -	1	10	0			
Harneſs for 2 horſes, -	2	10	0			
Screen, buſhel, forks, &c. &c.	2	0	0			
Sacks - - -	1	10	0			
Dairy furniture, -	1	0	0			
				28	1	6
Carry over,			£.	98	1	6

Brought over, £. 98 1 6

Live ſtock.

2 Horſes, -	£. 24	0	0
7 Cows, - -	35	0	0
1 Sow, - -	1	0	0
		60	0	0

Seed and tillage.

Four earths on 12½ acres of wheat land, -	10	0	0
Seed, - -	7	10	0
Sowing, - -	0	6	3
Water-furrowing, -	0	12	6
Two earths for 9 acres of barley land, - -	3	12	0
Seed, - - -	4	10	0
Sowing, - -	0	2	3
Water-furrowing, -	0	4	6
One earth on 3½ acres of oat land, - -	0	14	0
Seed, - - -	1	15	0
Sowing, - -	0	0	10½
Water-furrowing, -	0	1	9
Seed for 12½ acres of clover,	2	10	0
Sowing, - -	0	3	1½
	32	2	3

Labour.

In harveſt, - -	10	6	3
At ſowing times, -	2	13	1½
Ditching, - -	2	10	0
At other times, -	7	14	0
	*23	3	4½

Carry over, £. 213 7 1½

* I am ſenſible the ſum total of this labour is not wanting the firſt year, but I charge it as in ſucceſſive

Brought over, £. 213 7 1½

Sundry articles.

Shoeing, and wear and tear, - -	£ 4	10	0
Houſe-keeping, and cloaths, beſides the advantages of the farm in ſmall articles, ſuch as garden, dairy, ſwine, &c. and beſides the earnings of the family, if any, - -	8	0	0
Hire of a horſe in harveſt for 14 days, - -	1	0	0
Additions to houſhold furniture, - -	5	0	0
		18	10 0
	£.	231	17 1½

There are variations in this account from that in the preceding chapter, which require an explanation.

Rent, &c.

The rent, no more than the tythe and pariſh charges, is an article of great conſequence to be minutely accurate in; as any may eaſily vary it according to private circumſtances. However, I am to keep as near the probability of truth as poſſible, and reckon that the ſame land, as treated of in the preceding chapters, to let for 1 *s.* an acre leſs when in farms of 50 acres, than in thoſe of 36. It is an undoubted truth, that, in rich

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ſucceſſive years for ſeveral reaſons; the variation is not conſiderable, as the article *Seed and tillage* includes only two ſeed times. In ſtocking, every thing ſhould be rated high.

countries,

countries, the leſs a farm is, the better the land lets: This abatement of 1 *s.* may not be preciſely exact, but I believe it is near the proportion, as the difference between 50 and 36 acres is not great.

Implements.

Some of theſe articles I increaſe in price ſomething in proportion to the work they muſt perform, and add principally to ſuch as beſt admits it from the lowneſs of the preceding rates. The ſame obſervation is applicable to the article *Live ſtock*, and particularly in the increaſed price of the horſes.

Seed and tillage.

Under this head is ſpecified the diviſion of the land into wheat, ſpring corn, and clover; when a tenant takes a new farm, he muſt not expect to find it thrown into ſo beneficial a courſe as he will afterwards do himſelf: This year a fourth is fallow, but it will afterwards be a fallow crop, that is, beans in drills.

Labour.

This farm requires much aſſiſtance in this article, and conſequently we muſt be ſomewhat accurate in explaining why the above ſums are charged, and this can only be done by forming a new calendar of the work of this farm, as before of the other. Without this aſſiſtance, we ſhall be in the dark throughout the whole chapter. We begin, as before, after the concluſion of harveſt.

October. Ploughing 12½ acres of wheat, (ſowing hired), - -	*Days*,	13
Ditto, 12½ of laſt year's ſtubble, -		13
		26

To

To hire.	*l.*	*s.*	*d.*	
Sowing the wheat, - -	0	6	3	
Water-furrowing, - -	0	12	6	
£.	0	18	9	
November. Threshing 13 quarters of wheat,				26
December. Ditto, - - -				26
January. Either in December, January, or February, the opportunity of a dry time or a moderate frost must be taken to re-plough the fallow; I may therefore charge it here, - - -				13
Water-furrowing ditto, - - -				6
Sundry small articles of work, - -				7
				26
February. Threshing 7 quarters of wheat,				14
Ditto 26 quarters of spring-corn, -				13
				27

To hire.	*l.*	*s.*	*d.*	
Manuring, - - -	1	5	0	
50 Perch of ditching, at 1 *s.* -	2	10	0	
£.	3	15	0	
March. Ploughing 12½ acres of bean land (the fallow) - - - -				13
Ditto 12½ the last year's bean land for barley and oats, - - -				13
				26

To hire.	*l.*	*s.*	*d.*
Sowing 12½ acres of beans, -	0	12	6
Water-furrowing, - -	0	6	3
Carry over, £.	0	18	9

Brought over,	£. 0	18	9
Water-furrowing the other 12½,	0	6	3
Threſhing 12 qrs. of ſpring corn,	0	12	0
	£. 1	17	0

April Ploughing 12½ acres of barley and oat land, - - *days*, 13
Threſhing 12 qrs. of ſpring corn, - 12
Small articles, - - - 2
27

To hire.	*l.*	*s.*	*d.*
Sowing, 12½ acres of ſpring corn,	0	3	1½
Water-furrowing, - -	0	6	3
Threſhing 25 qrs. beans, -	1	5	0
	£. 1	14	4½

May. Ploughing between the rows of the beans, - - - 7
Manuring, - - - 8
Hand hoeing 2½ acres beans, - 10
25

June. Ploughing between the rows of the beans, - - - - 7
Hand-hoeing 4 acres of beans, - 15
Carting 3 acres of clover-hay, - - 5
27

To hire.	*l.*	*s.*	*d.*
Hand-hoeing 6 acres of beans,	1	10	0
Mowing and making 3 acres of clover-hay, - -	0	12	0
Carting ditto, 5 days, - -	0	6	3
Thiſtling or weeding 25 acres of corn, - - -	1	5	0
	£. 3	13	3

July.

July. Ploughing between the rows of the beans, - - - *days*, 7
Carting, manure, and other jobbs, - 20

27

Auguſt. Carting 12½ acres of wheat, - 4
Ditto of barley and oats, - - 9
Ditto 12½ of beans. - - - 9
Sundry ſmall articles, - - - 5

27

To hire.	*l.*	*s.*	*d.*
Reaping 12½ acres of wheat, -	3	2	6
Ditto of beans, - -	3	15	0
Mowing 12½ acres of barley and oats, - - -	0	18	9
Turning, and harveſting, and carting, - - -	2	10	0
£.	10	6	3

September. Mowing and making, and carting, 3 acres of clover-hay, - 10
Ploughing the bean-land, and throwing it up for the winter, - - 13
Carting 12½ acres ſtubble, - - 4

27

To hire.	*l.*	*s.*	*d.*
Chopping and raking 12½ acres of ſtubble, - - -	0	18	9

The ſum total of the labour hired is 23 *l.* 3 *s.* 4½ *d.*

Sundry articles.

Under this head ſome additions are made relative to the increaſe of buſineſs, and the article of houſe-

houſe-keeping is increaſed to bear a more regular proportion to the ſubſtance of the farmer; for the ſame reaſon is the addition to the houſhold furniture, which I ſuppoſe him to have been poſſeſſed of before. The hiring a horſe in harveſt-time is in very few places a difficulty, as that is not a buſy time for horſes; and the allowance I make of price will eaſily procure one.

The annual account of this farm will be as follows:

Rent, &c. - -					£.	70	0 0
Seed for 12½ acres of wheat, - -	£.	7	10	0			
Ditto 12½ acres of barley and oats, - -		6	5	0			
Seed for 12½ acres of clover, - -		2	10	0			
Ditto, 12½ of beans, -		5	0	0			
						7	10 0
Labour, - - -						23	3 4½
Sundries, - - -						13	10 0
					£.	127	18 4½

Produce.

12½ Acres of wheat, - -	50	0	0
9 Of barley, - - -	27	0	0
12½ Of beans, - - -	37	10	0
7 Cows, - - -	35	0	0
	149	10	0
Expences, - -	127	18	4½
	21	11	7½
Deduct the intereſt of the ſtock,	£. 11	11	0
Profit, - - - -	10	0	7½

The

The reſult of this account is remarkable. We find in it that a man may, in ſome inſtances, increaſe his ſtock, and proportionably enlarge his farm, and then find himſelf poorer than he was before. The beans, in this account, are valued at more than in the laſt chapter, for reaſons which need not be here ſpecified; and yet we find the profit, upon the whole, not more than half what it was with the leſs farm. This is owing to the labour; and ſomething of this kind will always be obſerved in the dependence upon hired labour, inſtead of the work of the farmer's own hands. Before, he depended on himſelf alone, (a trifle excepted), but now, nearly, as much on another man as on himſelf. Nor is this out of proportion; for, although the other farm was 36 acres, and this 50, yet the labour is much out of this proportion, which is owing to *ſeaſons*. If the work was equally divided through the whole year, it would be a different caſe; but it comes at ſeaſons, when, if a man does it not himſelf, it muſt be done by another, and cannot wait for his having time to perform it himſelf.

N° 2.

Variation the firſt.

The ſame, half arable and half graſs, ſoil clay or loam.

Stock.

Rent, &c. as before,	-		£.	70	0	0
Implements, ditto,	-	-		28	1	6

Live ſtock.

2 Horſes,	-	- £.	20	0	0
5 Cows,	-	-	25	0	0
1 Sow,	-	-	1	0	0
30 Home-bred heifers,		-	90	0	0
			136	0	0
Carry over,		£.	234	1	6

Brought over,			£.	234	1 6

Seed and tillage.

6 Acres of wheat land, 4 earths, - -	£.	4	16	0
Seed, - -		3	12	0
Sowing, - -		0	3	0
Water-furrowing, -		0	6	0
3 Acres of barley-land, 2 earths, - -		1	4	0
Seed, - -		1	10	0
Sowing, - -		0	0	9
Water-furrowing, -		0	1	6
3 Acres of oat-land, one earth, - -		0	12	0
Seed, - -		1	10	0
Sowing, - -		0	0	9
Water-furrowing, -		0	1	6
Seed, 6 acres of clover,		1	4	0
			15	1 6

Sundry articles.

Shoeing, and wear and tear, - -	4	0	0	
Houſe-keeping, -	8	0	0	
Additions to furniture, -	5	0	0	
			17	0 0
	£.		266	3 0

This farm I ſuppoſe him to manage without aſſiſtance; but he can ſpare no time to work for others.

ANNUAL ACCOUNT.

Rent, &c. - - -	£.	70	0 0
30 Heifers, - - -		90	0 0
Carry over,	£.	160	0 0

Brought over,	£. 160	0	0
Seed, 6 acres of wheat, - -	3	12	0
Ditto, 6 of barley and oats, -	3	0	0
Ditto, 6 of beans, - -	2	8	0
Ditto, 6 of clover, - -	1	4	0
Shoeing, wear and tear, and houſe-keeping, - - -	12	0	0
	£. 182	4	0

Produce.

30 Heifers, fat, - -	£. 150	0	0
5 Cows, - - -	25	0	0
6 Acres of wheat, - -	24	0	0
3 Of barley, - - -	9	0	0
6 Of beans, - - -	18	0	0
	£. 226	0	0
Expences, - - -	182	4	0
	43	16	0
Deduct the intereſt of the ſtock, -	13	6	0
Profit, - - -	£. 30	10	0

This profit is conſiderable, and is a freſh proof of the great ſuperiority of graſs to arable land. If cows are ſubſtituted for the 25 acres of graſs, inſtead of fatting cattle, the profit will be much leſs; for, according to the preceding calculations, we can allot but 8 or 9; which, at 5*l.* is only 45 *l.* produce; whereas the heifers pay 60*l.* nor ſhould any one object to 60*l.* as the produce of 25 acres, at 20*s* an acre.—Indeed, it is under much rather than over the truth. Theſe 25 acres coſt the farmer 35*l.* a year; ſurely they ought to produce 60*l.* to pay every thing, and intereſt for the money employed. The calculation is undoubtedly low.

N° 3.

N° 3.

Variation the ſecond.

The ſame, all graſs, the ſoil clay or loam.

	Stock.	*l.*	*s.*	*d.*
Rent, at 24 *s.* -	£. 60 0 0			
Tythe, at 4 *s.* -	12 0 0			
Rates, at 4 *s.* -	12 0 0			
		84	0	0
Implements.				
Dairy furniture, - -		1	0	0
Live ſtock.				
2 Cows, - -	10 0 0			
1 Sow, - -	0 15 0			
60 Heifers, -	180 0 0			
		190	15	0
Houſe-keeping and furniture, -		13	0	0
	£.	277	15	0

The ANNUAL ACCOUNT.

Rent, &c. - -	£.	84	0 0
60 Heifers, - - -		180	0 0
Houſe-keeping, &c. - -		8	0 0
Hire of carts, &c. to carry the ditch earth unto the land, - -		3	0 0
	£.	275	0 0
Produce.			
60 Heifers, - - -	£.	300	0 0
2 Cows, - - -		10	0 0
		310	0 0

Produce, - - -	£. 310	0	0
Expences, - - -	275	0	0
	35	0	0
Deduct the intereſt of the ſtock, -	14	8	0
Profit, - - - -	£. 20	12	0

Now, according to the preceding accounts, I ſhould here add the produce of almoſt a whole year's labour, or 20*l.* at leaſt, which would double the above remainder; but one circumſtance muſt here be conſidered. A farmer who has 300*l.* worth of cattle on his land may probably work hard upon his own farm, but not at all upon that of another man. This has nothing to do with calculation indeed; but it has with human nature; and we muſt not expect that every man will ſacrifice all his paſſions to the grand object of profit. This farmer having nothing to do, may, however, keep himſelf lightly employed about his fences, in digging excellent ditches throughout his farm, in draining any wet fields he may have, and in other little improvements, to keep him out of idleneſs. But this ceſſation of the farmer's working for others, when not fully employed at home, makes a great variation in the profit of the farms taken at large, on comparing one with another. It is however remarkable, that this farmer, almoſt in idleneſs, makes double the profit of his brother, who occupies the ſame quantity of land, but all arable, notwithſtanding he is conſtantly employed.

N° 4.

Variation the third.

Diviſion of 250 l. in ſtocking a farm of 40 acres all arable, the ſoil clay or loam, to be laid down to graſs.

Stock.

Rent, at 20 *s.* -	£.	40	0	0	
Tythe, at 4 *s.* -		8	0	0	
Rates, &c. at 4 *s.* -		8	0	0	
					56 0 0

Implements.

Theſe the ſame as before, - -					28 1 6

Live Stock.

2 Horſes, - -		20	0	0	
5 Cows, - -		25	0	0	
1 Sow, - -		1	0	0	
					46 0 0

Seed and tillage.

Four earths on 10 acres of wheat land, - -		8	0	0	
Seed, - -		6	0	0	
Sowing, - -		0	5	0	
Water-furrowing, -		0	10	0	
Two earths on 7 acres of barley land, -		2	16	0	
Seed, - -		3	10	0	
Sowing, - -		0	1	9	
Water-furrowing, -		0	3	6	
One earth on 3 acres of oat land, - -		0	12	0	
Seed, - -		1	10	0	
Sowing, - -		0	0	9	
Carry over,	£.	23	9	0	130 1 6

Brought over,	£. 23	9	0	130	1	6
Water-furrowing, -	0	1	6			
Seed for 10 acres of clover,	2	0	0			
Sowing, - -	0	2	6			
				25	13	0

Labour.

This article muſt be calculated with an eye to that of the 50 acres all arable, but, not (as has been already remarked) in exact proportion; becauſe the leaſt quantity of land requires a leſs proportion of aſſiſtance: 50 acres required 23 *l.* 3 *s.* 4½ *d.* At that rate 40 acres would require 18 *l.* 10 *s.* but we ſhall ſay, as there are no beans, - - - - 10 0 0

Sundry articles.

Shoeing, and wear and tear, - -	4	0	0			
Houſe-keeping, -	8	0	0			
Furniture, - -	5	0	0			
				17	0	0
				£. 182	14	6

Having thus ſtocked his farm, and received it in the common ſtate of crops, his next buſineſs will be to lay it down. The produce of the firſt year will be as follows:

10 acres of wheat, - -	£. 40	0	0
7 Of barley, - - -	21	0	0
5 Cows, - - -	25	0	0
	£. 86	0	0

The

The ſtate of the farm, this firſt year, is 10 acres of wheat; 10 of barley and oats; 10 of an old clover lay; and 10 fallow: The ſecond year the account will vary.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	56	0	0
Seed for 20 acres of ſpring-corn, -	10	0	0
Ditto, graſs ſeeds, - -	20	0	0
Labour, - - -	10	0	0
Sundry articles, - -	12	0	0
£.	108	0	0

Produce.			
17 Acres of barley, - -	51	0	0
5 Cows, - - -	25	0	0
£.	76	0	0

Expences, -	£. 108	0	0
Produce, - -	76	0	0
	32	0	0
Intereſt of the ſtock, -	10	4	0
Loſs, - -	£. 42	4	0

This year the fields were 20 acres ſpring corn with graſs-ſeeds, and 20 acres fallow. The next it will be,

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	56	0	0
Seed for 20 acres of ſpring corn, -	10	0	0
Seed for 20 acres of ſpring graſs, -	20	0	0
Labour, - - -	10	0	0
Sundry articles, - -	12	0	0
£.	108	0	0

Produce.

17 Acres of barley, - -	£.	51	0 0
4 Cows ſold off, - - -		20	0 0
18 Acres of new graſs, mown for hay, ſtacked on the farm, and ſold, 20 loads, at 30*s.* - -		30	0 0
1 Cow, - - - - -		5	0 0
		106	0 0
Expences, - - -		108	0 0
Produce, - - -		106	0 0
		2	0 0
Intereſt, - - -		11	16 0
Loſs, - - -	£.	13	16 0

The next year's account will be as follows:

Expences.

Rent, &c. - - -	£.	56	0 0
Labour now cannot be above, -		3	0 0
Houſe-keeping, - - -		8	0 0
25 Heifers, - - -		75	0 0
	£.	142	0 0

Produce.

25 Heifers, fat, - -		125	0 0
1 Cow, - - -		5	0 0
20 Loads of hay, at 30*s.* - -		30	0 0
Product of the implements and horſes re-ſold; they coſt 48 *l.* 1 *s.* 6 *d.* - - -		30	0 0
	£.	190	0 0

Produce,

Produce, - - -	£. 190	0	0
Expences, - - -	142	0	0
	48	0	0
Intereſt, - - -	13	8	0
Profit, - - -	£. 34	12	0

Having thus laid down the whole, we muſt next ſtate the Annual Account, which will be as follows:

Expences.

Rent, &c. - - -	£. 56	0	0
Houſe-keeping, - - -	8	0	0
50 Heifers, - - -	150	0	0
Horſes and carts, for ditch-earth, -	3	0	0
	£. 217	0	0

Produce.

50 Heifers, fat, - -	£. 250	0	0
1 Cow, - - -	5	0	0
	255	0	0
Expences, - - - -	217	0	0
	38	0	0
Intereſt of the ſtock, - -	14	15	0
Profit, - - -	£. 23	5	0

GENERAL ACCOUNT.

The firſt ſtock, - -	£. 182	14	6
Produce of the firſt year, below the expences of the ſecond, by	22	0	0
Ditto of the ſecond, below thoſe of the third, - - - -	32	0	0
Carry over,	£. 236	14	6

Brought over, £.	236	14	6
Ditto of the third, below the fourth, -	36	0	0
Ditto of the fourth, below the fifth, &c.	27	0	0
Which total is the ſum neceſſary for the farm, - - - £.	299	14	6

The profit of this farm is ſuperior to that from 50 acres of land, of the ſame ſort, and ſame ſoil; which is owing to the difference of rent, and a few more inconſiderable circumſtances. If the farmer's labour was now to be added, the profit upon this farm would amount to a more conſiderable ſum; but that is omitted, for the ſame reaſon as before mentioned.

The method of calculation I have traced in this ſketch, is, I apprehend, that which will, in ſimilar caſes, lead, in the ſureſt and moſt accurate manner, to truth. Farmers, convinced of the ſuperior value of graſs land in little farms, may be afraid of hiring an arable one, with a view to lay it down, leſt the expences ſhould run up much beyond what they can afford: But, if they proceed in this manner in calculating the expence, they cannot be deceived, and will diſcover from it not only the ſum of money requiſite, but the times when it will be expended, and the amount of the annual benefit from it. But one thing they muſt let me caution them well againſt; which is, ſaving any thing (as they may call it) in the purchaſe of graſs-ſeeds. Leſs than twenty ſhillings worth will not lay an acre of land well: Nothing can be attended with more pernicious effects than any deductions from the ſum I have allotted.

N° 5.

Variation the fourth.

50 *Acres all arable, the ſoil light enough for turnips.*

Stock.				*l.*	*s.*	*d.*
Rent, &c. as before, - -				70	0	0
Implements, ditto, - -				28	1	6
Live ſtock.						
2 Horſes, - -	£.	24	0 0			
3 Cows, - -		15	0 0			
1 Sow, - -		1	0 0			
25 Home-bred heifers, ſteers, old cows, or black cattle, at 5 *l.*		125	0 0			
				165	0	0
				£. 263	1	6
Seed and tillage.						
Four earths on 12½ acres of wheat land, -		10	0 0			
Seed, - -		7	10 0			
Sowing, - -		0	6 3			
Two earths on 9 acres of barley land, - -		3	12 0			
Seed, - - -		4	10 0			
Sowing, - -		0	2 3			
One earth on 3½ acres of oat land, - -		0	14 0			
Seed, - -		1	15 0			
Sowing, - -		0	0 10½			
Seed for 12½ acres of clover, - -		2	10 0			
Sowing, - -		0	3 1½			
Seed for 12½ acres of turnip land, - -		0	6 3			
				31	9	10
Carry over,				£. 294	11	4

Labour.

Brought over, £. 294 11 4

Labour.

At firſt ſight this ſhould be leſs than in the clay farm; for ¾ths of that were always in corn, whereas only half of this is; but then, on the contrary, the turnip land in this farm requires more ploughing than the bean land in the other; but again, to oppoſe this circumſtance, is the horſe-hoeing the beans: The hand-hoeing to each is pretty equal, but allowance muſt be made for 6 or 7 acres of clover in this farm mown twice, and alſo for the attendance on the fatting cattle: I ſhall ſuppoſe theſe circumſtances to throw the two farms on a par, - - 23 3 4½

Sundry articles.

Shoeing, and wear and tear, - -	£. 4	10	0
Houſe-keeping, -	8	0	0
Hire of a horſe 7 days in harveſt, - -	0	10	0
Additions to furniture, -	5	0	0
		18	0 0
	£. 335	14	8½

I ſuppoſe this farm to be thrown into an excellent courſe; that is, 1. turnips; 2. barley; 3. clover; 4. wheat. I ſuppoſe the turnips to be drawn, and the heifers, or ſteers, ſtall-fed on them, and likewiſe to have 6 acres of clover-hay to feed on at the ſame time; that is, one cutting; the

the ſecond is for ſeed. But, in many farm-yards, and eſpecially belonging to little farmers, it is twenty to one whether we find a houſe large enough to fat ſuch a number of cattle; the farmer muſt therefore feed them in his farm-yard, for which purpoſe he muſt complete the incloſure of it (if it is not done already) with ſtacks of ſtubble; the expence of making which is but trifling; and they are perfectly effectual in keeping the yard warm: Next, he muſt provide himſelf with long cribs, (that is, make them himſelf) or bings, of ſtrips of pole, or rafts, nailed together in the form of a large manger, and upon legs, for the cattle to eat the turnips out of. 12 acres and ½ and 6 acres of clover-hay will undoubtedly be ſufficient to fat, one year with another, 25 beaſts of 5 *l.* value each — The annual expence of this farm will be as follows:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	70	0	0
25 Beaſts, - - -	125	0	0
Seed for 12½ acres of wheat, -	10	0	0
12½ Acres of barley and oats, -	6	5	0
12½ Ditto of clover, - -	2	10	0
12½ Ditto of turnips, - -	0	6	3
Labour, - - -	23	3	4½
Sundry articles, - - -	13	0	0
£.	250	4	7½

Produce.			
12½ Acres of wheat, - -	50	0	0
Barley 9 acres, - - -	27	0	0
Clover ſeed 6 ditto, 4 buſhels, at 15 *s.*	18	0	0
25 Fat beaſts, - -	175	0	0
3 Cows, - - -	15	0	0
	285	0	0

Produce

Produce, - - -	£. 285	0	0
Expences, - - -	250	4	7½
	34	15	4½
Deduct intereſt of the ſtock, -	16	15	0
	£. 18	0	4½

This profit, although not equal to that of graſs land, is ſomething conſiderable, and ſuperior to that of the ſame farm on a ſtiff ſoil, by nearly double the amount.

N° 6.

Variation the fifth.

The ſame, half graſs and half arable.

The Stock.

Rent, &c. - - -				£. 70	0 0
Implements, - - -				28	1 6
Live ſtock.					
2 Horſes, - -	£. 20	0	0		
30 Heifers, - -	90	0	0		
1 Cow, - -	5	0	0		
1 Sow, - -	0	15	0		
12 Beaſts - -	60	0	0		
				175	15 0
Seed and tillage.					
Six Acres of wheat, 4 earths, - -	4	16	0		
Seed, - -	3	12	0		
Sowing, - -	0	3	0		
3 Acres of barley, 2 earths,	1	4	0		
Seed, - -	1	10	0		
Sowing, - -	0	0	9		
3 Acres of oats, 1 earth,	0	12	0		
Carry over, £.	11	17	9	273	16 6

Brought over,	£.	11	17	9	273	16	6
Seed, - -		1	10	0			
Sowing, - -		0	0	9			
6 Acres of clover ſeed,		1	4	0			
Sowing, - -		0	1	6			
6 Acres of turnip-ſeed, -		0	3	0			
					14	17	0

Sundry articles.

Shoeing, and wear and tear, - -	£.	4	0	0		
Houſe-keeping, -		8	0	0		
Furniture, - -		5	0	0		
					17	0	0
					£. 305	13	6

I charge nothing to this farm for labour, as the farmer will be able to execute all the work of it with his own hands. The graſs land I ſtock, as before, with home-bred heifers for fatting; and the arable I throw into this courſe: 1. turnips; 2. barley; 3. clover; 4. wheat; fatting beaſts upon the turnips.

The Annual Account.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	70	0	0
30 Heifers, - - -	90	0	0
12 Beaſts, - - -	60	0	0
Seed for 6 acres of wheat, -	3	12	0
Ditto for 6 of ſpring corn, -	3	0	0
Ditto for 6 of clover, - -	1	4	0
Ditto for 6 of turnips, - -	0	3	0
Shoeing, and wear and tear, -	4	0	0
Houſe-keeping, - -	8	0	0
£.	239	19	0

Produce.

Produce.

1 Cow, - - -	£. 5	0	0
6 Acres of wheat, - -	24	0	0
3 Acres of barley, - -	9	0	0
30 Fat heifers, - -	150	0	0
12 Fat beaſts, - -	84	0	0
	272	0	0
Expences, - - -	239	19	0
	32	1	0
Intereſt of the ſtock, -	15	5	0
Profit, - - -	£. 16	16	0

RECAPITULATION.

N°. 1. Fifty acres all arable, the ſoil clay, yield an annual profit of, - -	£. 10	0	7½
2. Ditto half arable and half graſs,	30	10	0
3. Ditto all graſs, - -	20	12	0
4. Ditto all arable, the ſoil clay, and laid down to graſs, -	23	5	0
5. Ditto all arable, the ſoil light enough for turnips, - -	18	0	4½
6. Ditto half graſs and half arable. - - -	16	16	0

It is from hence apparent, that the moſt advantageous farm of theſe ſix, each of 50 acres, is the clay one, half graſs and half arable.

The next is the clay farm, all arable, and laid down to graſs.

The next is the clay farm, all of graſs.

The next is the light ſoil, all arable.

The next is the light ſoil, half arable and half graſs

And the laſt is the clay, all arable.

And

And the ſums required for ſtocking theſe farms are as follow.

N° 1.	- - -	£. 231	17 1½
2.	- - -	266	3 0
3.	- - -	288	15 0
4.	- - -	299	14 6
5.	- - -	335	14 8½
6.	- - -	305	13 6

The compariſon between theſe ſums and the profit, proves at once the importance of a man's conſidering well, before he engages in any farm. The difference between ſome of them is prodigious; nor can any thing better diſplay the great variations of profit from different ways of management: And the contraſts of theſe methods will yet further appear, from the following table of the proportion of the profit.

Farms.	*Product.*	*Profit per cent.*
N° 1. -	£. 21 11 7½ -	£. 9 5 0
2. -	43 16 0 -	16 9 0
3. -	35 0 0 -	12 2 0
4. -	38 0 0 -	12 13 0
5. -	34 15 4½ -	10 7 0
6. -	32 1 0 -	10 9 0

Here it appears that one farm pays almoſt double the intereſt of another; an immenſe difference, and claims, in the ſtrongeſt manner, the attention of all farmers that are about to fix themſelves.

CHAP. XIX.

Of the moſt advantageous method, on farms of 60 *or* 80 *acres of land, of diſpoſing of from* 300*l.* *to* 400*l. in farming.*

I Enter upon the ſubject of this chapter, well convinced, before I form any calculations, that two horſes are fully ſufficient to perform all the ploughing of any farm theſe ſums can ſtock; but, leſt I ſhould lay myſelf too much open to cavilling objections, I ſhall allow three horſes to ſeveral of the ſucceeding ones, not for the tillage of them, but the carting. I premiſe this firſt, as when I come to farms that require more than one plough, an hundred little variations will at once ariſe, that require freſh combinations of every kind.

N° 1.

Diviſion of from 300*l.* *to* 400*l. in ſtocking* 60 *acres of arable land, the ſoil clay or loam*.*

Rent, &c.

Rent, at 18*s.* -	£.	54	0	0	
Tythe, at 4*s.* -		10	16	0	
Town charges, &c. &c. at 4*s.* - -		10	16	0	
					75 12 0

Implements.

2 Carts, -	£.	18	0	0	
A plough, - -		1	11	6	
Carry over,	£	19	11	6	75 12 0

* It is uſeleſs to ſay beans the fallow, as that method was found moſt advantageous.

Brought over,	£.	19	11	6	75	12	0
Harrows, - -		2	0	0			
Roller, - -		1	10	0			
Harneſs for 3 horſes, -		4	0	0			
Screen, buſhel, fans, ſieves, &c. &c. &c. -		4	0	0			
Sacks, - -		1	15	0			
Dairy furniture, -		1	10	0			
					34	6	6

Live ſtock.

3 Horſes, -	£.	36	0	0			
8 Cows, - -		40	0	0			
1 Sow, - -		1	0	0			
					77	0	0

Seed and tillage.

4 Earths on 15 acres of wheat land, -	£.	12	0	0			
Seed, - -		9	0	0			
Sowing, - -		0	7	6			
Water-furrowing, -		0	15	0			
2 Earths on 10½ acres of barley-land, - -		4	4	0			
Seed, - -		5	5	0			
Sowing, - -		0	2	7½			
Water-furrowing, and harrowing, - -		0	5	3			
One earth on 4½ acres of oat land, - -		0	18	0			
Seed, - -		2	5	0			
Sowing, - -		0	1	1½			
Water-furrowing, &c.		0	2	3			
Seed, 15 acres of beans,		6	0	0			
					41	5	9

Labour.

Sundry times in the year, hired to the amount of - -					32	10	9
Carry over,	£.				260	15	0

		Brought over,	£. 260	15	0

N. B. 1 *l.* 13 *s.* 9 *d.* are included in the above; but the difference is too ſmall to divide.

Sundry articles.

Shoeing, - -	£. 1	16	0	
Wear and tear, -	4	0	0	
Houſe-keeping, &c. as before, - -	10	0	0	
Additions to furniture,	10	0	0	
			25	16 0
		£.	286	11 0

There are ſeveral variations in this account from the preceding, which require the like explanations as I gave before.

Rent, &c.

This I have lowered 2 *s. per* acre on account of the quantity of land.

Seed and tillage.

I ſuppoſe the farm thrown into four parts, one wheat, one barley and oats, one clover, and one beans in rows.

Labour.

This article I have ſtated, as particularly as poſſible, in the ſame manner I did before. It is of ſo great conſequence, that I ſhall inſert a calendar of the whole that is wanting in the farm; which method is abſolutely neceſſary to follow with every chapter, while we treat of ſuch farms as depend on the farmer for the total labour of one man. If we ſuppoſe him to hire the whole, we muſt deduct 24 *l.* from the profit of all the preceding arable ones; what then will the remainder

mainder be? However, it is ſelf-evident that we muſt, in ſuch farms as theſe, adhere to that ſuppoſition.

October. Ploughing 15 acres of wheat land,

	days,
Ditto of the laſt year's ſtubble,	15
	11
	26

To hire.

	£.	s.	d.
Sowing the wheat, -	0	7	6
Water-furrowing, -	0	5	0
£.	1	2	6

November. Ploughing 4 acres of laſt year's ſtubble, - - - 4

Thraſhing 11½ qrs. of wheat, 23

27

December. Thraſhing, 13 qrs. of wheat, 26

To hire.

	l.	*s.*	*d.*
Thraſhing, 13 qrs. wheat -	1	6	0

January. Ploughing the laſt year's ſtubble a ſecond time, - - *days,* 15

Water-furrowing ditto, - 7

Sundry ſmall articles of work, 5

27

To hire.

	l.	*s.*	*d.*
Thraſhing 40 qrs. of ſpring corn,	2	0	0

February. Manuring, - - 20

Thraſhing, 14 qrs. of ſpring corn, 7

27

To hire.

Thraſhing, 6 qrs. ſpring corn,	£.	0	6 0
50 Perches of ditching, -		2	10 0
	£.	2	16 0

March. Ploughing the fallow of beans, 15
Ditto, 11 of the laſt year's bean-land, for barley and oats, - 11
26

To hire.

Thraſhing 30 qrs. of beans,	£.	1	10 0
Sowing 15 acres of beans,		0	15 0
Water-furrowing, -		0	7 6
30 Perches of ditching, -		1	10 0
	£.	4	2 6

April. Ploughing 15 acres of barley and oats, - - *days*, 15
Water-furrowing ditto, - 7
Sundry ſmall articles, - - 5
27

To hire.

Sowing 15 acres of barley and oats, - -	£.	0	3 9
Water-furrowing, ditto, -		0	7 6
	£.	0	11 3

May. Ploughing between the rows of the beans, - - - 8
Manuring, - - 18
26

To

To hire.

Hand-hoeing the beans, £. 3 15 0

June. Plowing between the rows of the beans, - - - 8
Carting 4 acres of clover-hay, - 6
Mowing and making ditto, - 7
Sundry ſmall articles, - - 5
26

To hire.

Aſſiſtance in carting 6 days, £. 0 7 6
Thiſtling, or weeding 30 acres of corn, - - 1 10 0
£. 1 17 6

July. Plowing between the rows of the beans, - - *days*, 8
Carting manure, and other work, 18
26

Auguſt. Carting 15 acres of wheat, 5
Ditto, 15 of barley and oats, - 10
Ditto, 15 of beans, - - 8
Sundry ſmall articles, - - 3
26

To hire. *l.* *s.* *d.*

Reaping 15 acres of wheat, 3 15 0
Ditto, of beans, - - 4 10 0
Mowing 15 of barley and oats, 1 2 6
Turning, harveſting, and carting, 3 10 0
£. 12 17 6

September. Ploughing the bean-land, and throwing it up for the winter,	15
Carting 15 acres of wheat-ſtubble, -	5
Carting, clover-hay, - -	7
	27

To hire.

Mowing, making, and carting, the clover-hay, - -	£. 0	15	0
Carting the wheat-ſtubble,	0	5	0
Chopping ditto, -	1	2	6
	£. 2	2	6

Sundry articles.

Theſe are all varied in the account being increaſed in proportion to the buſineſs and the ſubſtance of the farmer.

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	75	12	0
Seed for 15 acres of wheat, -	9	0	0
Ditto for 15 of barley and oats,	7	10	0
Ditto 15 of beans, - -	6	0	0
Ditto for 9 of clover, - -	3	0	0
Labour, - -	32	10	9
Sundries, - - -	15	16	0
£.	149	8	9

Produce.	*l.*	*s.*	*d.*
15 Acres of wheat, -	60	0	0
15 Of beans, - -	45	0	0
Carry over, £.	105	0	0

Brought over,	£.	105	0 0
10½ Of barley, - -		31	10 0
8 Cows, - - -		40	0 0
	£.	176	10 0
Expences, - -		149	8 9
		27	1 3
Deduct the intereſt of the ſtock,		14	6 0
Profit, - - -	£.	12	15 3

This profit is but ſmall, conſidering the ſize of the farm, and the completeneſs of the culture; but three horſes and ſo much labour is the explanation.

N° 2.

Variation the firſt.

The ſame all arable, the ſoil light enough for turnips.

Stock.

Rent, &c. - -	£.	75	12 0
Implements, - -		34	6 6

Live Stock.

3 Horſes, -	£. 36	0 0	
2 Cows, -	10	0 0	
1 Sow, - -	1	0 0	
30 Home bred heifers, ſteers or black cattle,	150	0 0	
		197	0 0
	£.	306	18 6

Seed and tillage.

Four earths on 15 acres of wheat land,	£. 12	0 0	
Seed, - -	9	0 0	
Sowing, - -	0	7 6	
		21	7 6
Carry over,	£.	328	6 0

	Brought over, £.			328	6 0
Two earths on 10½ acres of barley land, -		4	4	0	
Seed, - -		5	5	0	
Sowing, - -		0	2	7½	
One earth on 4½ acres of oat land, -		0	18	0	
Seed, - -		2	5	0	
Sowing, - - -		0	1	1½	
Seed for 15 acres of clover,		3	0	0	
Sowing, - -		0	3	9	
Seed 15 acres of turnips,		0	7	6	
				37	14 6

Labour.

This article I charge here as in the laſt chapter; that is, the ſame as in the clay farm,		32	10	9	

Sundry articles.

Theſe the ſame as in the clay farm, -		25	16	0	
				58	6 0
	£.			422	19 9

The reader perceives here that I aſſign the 15 acres of turnips to the fattening of beaſts: That number, with 7 acres of clover-hay, will be ſufficient for 30 of them.

The ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	75	12	0
30 Beaſts, - - -	150	0	0
Seed for 15 acres of wheat, -	9	0	0
Ditto, for 15 acres of ſpring corn,	7	7	0
Ditto for 15 of clover, -	3	0	0
Ditto for 15 of turnips, -	0	7	6
Carry over, £.	245	6	6

Labour,

Brought over,	£. 245	6	6
Labour, - - - - -	32	10	9
Shoeing, wear and tear, and houſe-keeping, - -	15	16	0
	£. 293	13	3

Produce.

15 Acres of wheat, -	£. 60	0	0
10½ Of barley, - - -	31	10	0
7 Acres of clover ſeed, - -	21	0	0
30 Fat beaſts, - - -	210	0	0
2 Cows, - - - -	10	0	0
	£. 332	10	0
Expences, - - - -	293	13	3
	£. 38	16	9
Intereſt on the ſtock, -	20	2	0
Profit, - - -	£. 18	14	9

This profit is much ſuperior to that of the clay farm. Some may, perhaps, object to theſe eſtimates of the turnip ſoil; that root is a precarious crop, being often deſtroyed by the fly, conſequently that ſo large a produce ſhould not annually be calculated: But, in anſwer to this, I muſt remark that wheat, barley, oats, &c. &c. and, in a word, all ſorts of crops, are precarious; they are ſubject to blights, ſmut, being laid, the dolphin, &c. &c., and tho' turnips may be more inſecure, yet, if I was to think of reducing the chance of failure to calculation in one caſe, I ſhould likewiſe do it in another, which would be an endleſs work, and but a jumble of confuſion at laſt. Another point to be conſidered is the value of the crops I have ſtated, which I do not think exceeds the *average* value of

of ſeveral years, all failures included: For I ſuppoſe good huſbandry to be practiſed on all, much tillage, good manuring with the earth out of ditches, &c. and the ameliorating crops, ſuch as turnips and beans, well hoed and ploughed; all theſe particulars are ſuperior to common management.

N° 3.

Variation the ſecond.

The ſame, half arable and half graſs, ſoil light enough for turnips.

Stock.				*l.*	*s.*	*d.*
Rent, &c. as before,				75	12	0
Implements as before,				34	6	6
Live ſtock.						
2 Horſes,	£.	24	0 0			
2 Cows,		10	0 0			
1 Sow,		1	0 0			
40 Heifers,		120	0 0			
12 Beaſts,		60	0 0			
				215	0	0
	£.			324	18	6
Seed and tillage.						
Four earths, on $7\frac{1}{2}$ acres of wheat land,	£.	6	0 0			
Seed,		4	10 0			
Sowing,		0	3 9			
Two earths on $4\frac{1}{2}$ acres of barley-land,		1	16 0			
Seed,		2	5 0			
Sowing,		0	1 $1\frac{1}{2}$			
One earth on 3 acres of oat land,		0	12 0			
Seed,		1	10 0			
Sowing,		0	0 9			
				16	18	$7\frac{1}{2}$
Carry over,	£.			341	17	$1\frac{1}{2}$

Brought over,			£. 341	17	1½
Seed for 7½ acres of clover,	1	10	0		
Sowing, - -	0	1	9		
Ditto of turnips, -	0	3	9		
			1	15	6

Labour.

I ſuppoſe the chief of the work of this farm to be executed by the farmer himſelf, -	5	12	9

Sundry articles.

Shoeing, -	£. 1	4	0		
Wear and tear, -	3	0	0		
Houſe-keeping, -	10	0	0		
Furniture, - -	10	0	0		
			24	4	0
			£. 373	9	4½

The article in this account which moſt wants explanation is the labour. We now approach to that farm which can exactly be managed by one pair of hands, without the loſs of any time, and without hiring any aſſiſtance: Such a farm is a point on which we ſhould fix our eye, as a guide to undiſcovered countries. I muſt here explain in what manner a man can do moſt of the buſineſs of 60 acres of land, half graſs and half arable; and I ſhall do this by ſo proportioning the work, that we may, at the ſame time, ſee how much more than 30 arable acres will come into the account. Were I ſcrupulouſly to adhere to the terms of my enquiry, I ſhould reject *all* aſſiſtance; but theſe ſheets are drawn up for uſe, not curioſity. It might be an entertaining diſquiſition, to ſearch for the minutely accurate proportions of one pair of hands, but it never would be profitable in practice to adhere

to

to ſuch accuracy: There are many times in the year, when it is much more beneficial, even for a very little farmer, to hire aſſiſtance than to do all his work himſelf. I ſhall therefore, in this inquiry, adhere, not to terms, but to a practical utility: I ſuppoſe the farmer himſelf to perform the bulk of his work, ſuch as ploughing, thraſhing, hand hoeing, feeding of cattle, &c. It belongs to a future chapter, to diſcover the moſt profitable farm that can be hired by a man, who will always keep himſelf employed on that work which moſt requires him.

The two kinds of arable farms hitherto chiefly conſidered, are the clay, and the ſoil light enough for turnips. In the firſt, the fallow is beans, in rows on 3 ploughings, and in the ſecond turnips on 6. Now, to ſave the repetition of inſerting two calendars of work, we muſt diſcover the proportion of the labour between theſe fallow crops. We will ſtate the account of one acre.

Beans.	*l.*	*s.*	*d.*
Three ploughings, 3 days at 1 *s.*	0	3	0
Sowing 1 day *, - - -	0	1	0
Water-furrowing, ½ a day, -	0	0	6
Ploughing, between the rows, 3 times, 2 acres in a day, -	0	1	6
Once hand-hoeing, - - -	0	6	0
Reaping, - - - -	0	6	0
Harveſting, (2 men 2 acres a day)	0	2	0
Thraſhing 2 qrs. at 1 *s.* - -	0	2	0
	£. 1	2	0

Barley, on this land, ſown on the third ploughing.

* It does not take up the whole, but by ſo much the beſt part, that the reſt (as in ploughing) is of little value.

Turnips.

Turnips.	*l.*	*s.*	*d.*
6 Ploughings,	0	6	0
2 Harrowings,	0	0	2
Sowing,	0	0	3
Two hoeings,	0	7	6
Carting them from the field to the farm-yard. This article muſt not be calculated for one acre;—the beſt way of coming to the truth is, to ſuppoſe that a man, with 2 horſes and a cart, will fully attend a given number of beaſts; that is, bring the turnips from the field, and throw them into the cribs or bings, and have an eye to the cattle every now and then, to ſee that all goes well among them, and likewiſe take care of the two horſes. I apprehend a man might eaſily manage from 30 to 40 beaſts in this manner; ſuppoſe 35 or 17* acres, and that they took the months of November, December, January, and February, and half of March. to fat in, or 19 weeks; that is, 5*l.* 14*s.* or per acre,	0	7	0
	£. 1	0	11
Expence of the beans,	1	2	0
——— of the turnips,	1	0	11
Exceſs of the former,	*£.* 0	1	1

* The reader muſt not forget that we are conſidering ſmall farms; conſequently, the field near the farm yard.

Now

Now this difference is ſo trifling, that it is not worth making a diſtinction between theſe methods of fallowing.—And it is, at the ſame time, a confirmation of the ſuppoſition I made in a preceding chapter, when I wrote the ſame amount of labour to the light land farm, as to the clay one.

As it therefore appears, that no diſtinction, in this eſtimate of one man's labour, is to be made between the light and heavy ſoils, I ſhall proceed to the particulars, ſuppoſing it a clay farm. I ſhall begin the work after harveſt as before. Suppoſe the quantity 30 acres.

		days,
October.	Ploughing 7½ acres of wheat land,	7½
	Ditto, 10 of laſt year's ſtubble,	7½
	Sowing the wheat,	3
	Small articles of work,	2
	Thraſhing, 3 qrs. of wheat,	7
		27
November.	Water-furrowing,	11
	Thraſhing 8 qrs. of wheat,	16
		27
December.	11 Perches of ditching,	11
	Thraſhing 7½ qrs. of wheat,	15
		26
January.	Manuring,	10
	Ploughing the laſt year's ſtubble, a ſecond time,	7
	Water-furrowing,	5
	Sundry ſmall articles,	4
		26

February.

February.	Thraſhing 45 qrs. of ſpring corn,	22
	5 Perches of ditching, - *days*,	5
		27
March.	Third ploughing of the fallow,	7
	Third ploughing the bean land for barley and oats, - -	7
	Water furrowing, - -	5
	Sowing the beans, - - -	7
		26
April.	Ploughing the barley and oat-land,	7
	Water-furrowing, - -	3
	Sowing, - - -	2
	9 Perches of ditching, - -	9
	Manuring, - - -	3
		24
May.	Ploughing between the rows of the beans - - -	4
	Hand-hoeing ditto, $7\frac{1}{2}$ acres, -	23
		27
June.	Ploughing between the rows of the beans, - -	4
	Carting 2 acres of clover-hay, -	3
	Mowing and making ditto. -	4
	Thiſtling 15 acres of corn, - -	15
		26

To hire.

Aſſiſtance in carting the clover hay, - - £. 0 4 6

July.	Ploughing between the rows of the beans, - -	4
	Carry over,	4

	Brought over, *days*,	4
	Sundry articles, manuring, &c.	22
		26
Auguſt.	Carting, $7\frac{1}{2}$ acres of wheat,	3
	Ditto, $7\frac{1}{2}$ of barley and oats,	5
	Ditto $7\frac{1}{2}$ of beans,	4
	Reaping $7\frac{1}{2}$ acres of wheat,	15
		27

To hire.

Reaping $7\frac{1}{2}$ acres of beans,	£.	2	5	0
Mowing $7\frac{1}{2}$ of beans and oats,		0	11	3
Harveſting		2	5	0
	£.	5	1	3

September.	Ploughing the bean-land, throwing it up for the winter,	7
	Carting clover-hay,	3
	Ditto $7\frac{1}{2}$ acres of wheat ſtubble,	3
	Mowing and making the clover,	5
	Chopping the ſtubble,	9
		27

To hire.

Aſſiſtance in carting,	£.	0	7	0

From hence it appears, that a man may with the aſſiſtance of 5 *l.* 12 *s.* 9 *d.* laid out in labour, cultivate 30 acres of arable land, the whole cropped either with beans, wheat, clover, and barley, or with turnips, barley, clover, and wheat.

The

The annual expence of this farm.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	75	12	0
40 Heifers, - - -	120	0	0
12 Beasts, - - -	60	0	0
Seed for 7½ acres of wheat, -	4	10	0
Ditto, for 7½ of barley and oats,	3	15	0
Ditto for 7½ of clover, -	1	10	0
Ditto, for 7½ of turnips, -	0	3	9
Labour, - - -	5	12	9
Sundry articles, - -	14	4	0
	£. 285	7	6

Produce.			
7½ Acres of wheat, -	£. 30	0	0
4½ Of barley, - -	13	10	0
2 Of clover-seed, - -	6	0	0
2 Cows, - -	10	0	0
40 Fat heifers, - -	200	0	0
12 Ditto beasts, - -	84	0	0
	£. 343	10	0
Expences, - -	285	7	6
	58	2	6
Deduct the interest of the stock,	18	13	0
Profit, - - -	£. 39	9	6

We find, upon coming to a tolerable proportion in the point of labour, that the profit is increased considerably; and this will be further illustrated in succeeding chapters.

N° 4.

Variation the third.

The ſame, all graſs, the ſoil clay or loam.

Stock.

Rent, &c.

Rent for 60 acres, at 1*l.* 2*s.* -	£.	66	0	0	
Tythe, at 4*s.* -		13	4	0	
Rates, &c. &c. 4*s.*		13	4	0	
					92 8 0

Implements.

Dairy furniture,	£.	1	10	0	
Sundry ſmall articles,		1	0	0	
					2 10 0

Live Stock.

1 Horſe, - -		10	0	0	
2 Cows, - -		10	0	0	
1 Sow, - -		0	15	0	
75 Home-bred heifers,	225	0	0		
					245 15 0

Sundry articles.

Shoeing, and wear and tear, - -	£.	1	0	0	
Houſe-keeping, -		10	0	0	
Additions to furniture,		10	0	0	
					21 0 0
					£. 361 13 0

When the ſtock of only one farm is ſtated, it is very eaſy to be conſiſtent; but in drawing up that of a progreſſive number, it is extremely difficult to keep proportion conſtantly in one's eye. I have charged this farm with a horſe, although

although it is all graſs, and none of it to be mown; but, in ſuch farms, many of the farmers will undoubtedly keep a riding horſe; and though not abſolutely neceſſary before, yet as it is an addition which muſt be made ſomewhere, it will come in here with the greateſt propriety; as expences of that and other ſorts muſt be ſuppoſed to hold a proportion to the ſubſtance of the man. And yet there is no doubt but he might walk to the fairs, as well as ride to them: and I profeſs not to guide myſelf (among little farmers) by what *is*, but by what *ought to be*; yet one cannot carry on a rigid adherence, even to one's own rules, without wounding the common practice too much.

And here it may not be amiſs further to remark that I eſtimate the article of cloaths, houſekeeping, pocket-money, &c. as low as the mere neceſſity, for a very material reaſon: *ſo much*, is a part of the neceſſary expences of the farm, like wear and tear, &c. &c. but if I was to calculate it in a varying manner, to hit off the real expences of farmers, I ſhould have no rule by which to conduct myſelf, and my eſtimates would be at beſt but uſeleſs. I therefore ſtate the neceſſary ſum; and the reſt muſt come out of the *profit*, in the diſpoſition of which I do not concern myſelf: It is either ſpent in family expences, in private ones, in improvements of the farm, or lent at intereſt. I ſhall, in a chapter by itſelf, conſider the conſequences of expending it, or a part, at leaſt, in improvements.——— The reader muſt excuſe my going ſo often out of my way, to explain and anſwer objections: It is a diſagreeable taſk, but oftentimes a neceſſary one.

The ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	92	8	0
75 Home-bred heifers, -	225	0	0
Shoeing, and wear and tear, and houſe-keeping, -	11	0	0
£.	328	8	0

Produce.			
2 Cows, - - -	10	0	0
75 Fat heifers, - -	375	0	0
	385	0	0
Expences, - - -	328	8	0
	56	12	0
Deduct the intereſt of the ſtock, -	18	1	0
Profit, - - - £.	38	11	0

N° 5.

Variation the fourth.

Seventy acres all graſs, ſoil clay or loam.

Stock.

Rent, &c.

				l.	*s.*	*d.*
Rent, of 70 acres, at 22 *s.* -	£.	77	0 0			
Tythe, at 4 *s.* -		15	8 0			
Rates, &c. &c. &c. 4 *s.*		15	8 0			
				107	16	0
Implements as before, -				2	10	0

Live ſtock.

1 Horſe, -	£.	10	0 0			
2 Cows, -		10	0 0			
				20	0	0
Carry over, £.				130	6	0

	Brought over,		£.	130	6 0
1 Sow, - -		0 15 0			
87 Home-bred heifers,		261 0 0			
				261	15 0
Sundry articles as before, -				21	0 0
			£.	413	1 0

ANNUAL ACCOUNT.

Expences.

Rent, &c. - - -	£.	107	16 0
87 Heifers, - - -		261	0 0
Sundry articles, - -		11	0 0
	£.	379	16 0

Produce.

2 Cows, - -	£.	10	0 0
87 Fat heifers, - -		435	0 0
		445	0 0
Expences, - - - -		379	16 0
		65	4 0
Intereſt of the ſtock, - -		20	13 0
Profit, - - -	£.	44	11 0

This increaſe of profit, on adding only 10 acres of land, and beyond the proportion of the ſum employed, ſhews how important it is to proportion theſe things with ſkill.

N° 6.

Variation the fifth.

Fifty acres, all arable, the ſoil clay or loam, and laid down to graſs.

Stock.

Rent, &c.

Rent of 50 acres, at 1 *l.* - -	£.	50	0	0	
Tythe, at 4 *s.* -		10	0	0	
Rates, &c. &c. at 4 *s.*		10	0	0	
					70 0 0

Implements.

2 Carts, -	£.	16	0	0	
A plough, -		1	11	6	
Harrows, - -		2	0	0	
Roller, - - -		1	10	0	
Harneſs for 2 horſes,		2	10	0	
Screen, buſhel, fans, &c. &c. - - -		2	0	0	
Sacks, - - -		1	10	0	
Dairy furniture, -		1	0	0	
					28 1 6

Live ſtock.

3 Horſes, -	£.	24	0	0	
2 Cows, - -		10	0	0	
1 Sow, - -		0	15	0	
					34 15 0

Seed and tillage.

Four earths on 12½ acres of wheat land, - -		10	0	0	
Seed, - -		7	10	0	
Sowing, - -		0	6	0	
Water-furrowing, -		0	12	6	
Two earths on 9 acres of barley land, -		3	12	0	
Carry over,	£.	22	0	6	132 16 6

Seed,

Brought over,	£. 22	0	6	132	16	6
Seed, - -	4	10	0			
Sowing, - -	0	2	3			
Water-furrowing, -	0	4	6			
One earth on 3½ acres of oat land, - -	0	14	0			
Seed, - -	1	15	0			
Seed for 5 acres of clover, and ſowing, -	1	1	3			
Sowing, - -	0	0	10½			
Water-furrowing, -	0	1	9			
				30	10	1½

Labour.

This article I calculate to be nearly the ſame as in N° 1. Chap xviii. on the ſame quantity of land: but as beans were there made the fallow, a deduction muſt be allowed: 23*l.* 3*s* 4½*d.* was the ſum; I therefore write, - £. 20 0 0

Sundry articles.

Shoeing, and wear and tear, - -	4	10	0			
Houſe-keeping, -	10	0	0			
Furniture, - -	10	0	0			
				24	10	0
				£. 207	16	7½

The firſt year's crops are 12½ acres of wheat; 12½ of barley and oats, and 25 fallow. The produce this year is

12½ Acres of wheat, -				£. 50	0	0
9 Of barley, - - - -				27	0	0
2 Cows, - -				10	0	0
				£. 87	0	0

The

The ſecond year the crops will be 25 acres of ſpring corn with graſſes, 5 acres of clover, till harveſt, when it will be fallowed with the reſt, and 20 acres of fallow. The account will be as follows:

Expences.

Rent, &c. - -	£.	70	0 0
Seed for 25 acres of ſpring-corn, -		12	10 0
Ditto, graſſes, - -		25	0 0
Labour, - - -		20	0 0
Sundry articles, - -		14	10 0
	£.	142	0 0

Produce.

21½ Acres of barley, -	£.	64	10 0
2 Cows, - - -		10	0 0
	£.	74	10 0

Expences, -	£.	142	0 0
Produce, - -		74	10 0
		67	10 0
Intereſt of the ſtock,		13	2 0
	£.	80	12 0

The third year the crops are 25 acres of ſpring corn with graſſes, and 25 acres of graſs, new laid. The account.

Expences.

Rent, &c. - -	£.	70	0 0
Seed for 25 acres of ſpring corn,		12	10 0
Ditto graſſes, - - -		25	0 0
Labour as before, £. 20 0 0			
Add for additional help in hay-time, - 3 10 0			
		23	10 0
Carry over,	£.	131	0 0

Brought over,	£. 131	0	0
Sundry articles, - -	14	10	0
	£. 145	10	0

Produce.	*l.*	*s.*	*d.*
21½ Acres of barley, - -	64	10	0
25 Loads of hay at the ſtack, -	37	10	0
2 Cows, - - - - -	10	0	0
	£. 112	0	0

Expences, - - -	145	10	0
Produce, - - -	112	0	0
	33	10	0
Intereſt of ſtock, - -	16	13	0
Loſs, - - -	£. 50	3	0

The fourth year it will all be graſs, half mown for hay, and half fed with heifers: The account as follows:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	70	0	0
Labour in hay time, - -	3	10	0
Shoeing, wear and tear, - -	1	15	0
Houſe-keeping, - - -	10	0	0
30 Heifers, - - -	90	0	0
	£. 175	5	0

Produce.			
25 Loads of hay, - -	£. 37	10	0
2 Cows, - - -	10	0	0
30 Fat heifers, - -	150	0	0
Carry over,	£. 197	10	0

Sale

Brought over,	£. 197	10	0
Sale of Implements and an horſe:			
They coſt, 38*l.* 1*s.* 6*d.* -	20	0	0
	£. 217	10	0
Expences, - - -	175	5	0
	42	5	0
Intereſt of ſtock, - -	16	16	0
Profit, - - - -	£. 25	9	0

The fifth year it will be fed; and every ſucceeding year the ſame.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	70	0	0
Shoeing, - - - -	0	12	0
Houſe-keeping, - -	10	0	0
Carts and horſes for ditch ſtuff, -	5	0	0
60 Heifers, - -	180	0	0
	£. 265	12	0

Produce.			
60 Fat heifers, - -	£. 300	0	0
2 Cows, - - -	10	0	0
	310	0	0
Expences, - - -	265	12	0
	44	8	0
Intereſt, - - -	22	5	0
Profit, - - -	£. 22	3	0

General account of ſtock.

Firſt ſtock, - -	£. 207	16	7½
Carry over,	£. 207	16	7½

Brought over,	£. 207	16	7½
Produce of the firſt year, inferior to the expences of the ſecond,	55	0	0
Produce of the ſecond year, inferior to the expences of the third,	71	0	0
Produce of the third year inferior to the expences of the fourth,	63	5	0
Produce of the fourth year inferior to the expences of the fifth, &c.	48	2	0
	£. 445	3	7½

Which total is the ſum requiſite for this farm.

RECAPITULATION.

N° 1. Sixty acres all arable, the ſoil clay, or loam, yields an annual profit of -	£. 12	15	3
2. The ſame, all arable, the ſoil light enough for turnips, ditto,	£. 18	14	9
3. The ſame; half arable and half graſs, the ſoil light enough for turnips, ditto, -	£. 39	9	6
4. The ſame, all graſs, the ſoil clay or loam, ditto, -	£. 38	11	0
5. Seventy acres all graſs: the ſoil clay, - - -	£. 44	11	0
6. Fifty acres all arable, the ſoil clay, and laid down to graſs,	£. 22	3	0

Next, we muſt bring into one view the ſums requiſite to ſtock theſe farms. They are as follow:

N° 1.

N° 1.	-	-	-	£. 286	11 0
2.	-	-	-	402	19 9
3.	-	-	-	373	9 4½
4.	-	-	-	361	13 0
5.	-	-	-	413	1 0
6.	-	-	-	445	3 7½

To profit by these particulars we must, in the next place, view the produce of these sums, and the rate *per cent.* of the profit.

Farms.		*Produce.*		*Profit per cent.*	
N° 1.	-	£. 27 1 3	-	£. 9 9	0
2.	-	38 16 9	-	9 12	0
3.	-	58 2 6	-	15 11	0
4.	-	56 12 0	-	15 3	0
5.	-	65 4 0	-	15 15	0
6.	-	44 8 0	-	9 19	0

From these tables it appears, *first*, that the best way of disposing of any sum of money from 373*l.* to 413*l.* is by hiring either a farm of 60 acres, half grass and half arable, the soil light enough for turnips;—or one of 60 acres, a stiff soil and all grass;—or, lastly, one of 70 acres, all grass; these three farms paying a better interest than any of the rest. But there is this difference between them, that the two last require scarce any work, a man being at liberty, notwithstanding his farm, to apply to many other sorts of business, and make advantage thereof. Of these, therefore, the grass farms are the best.

Secondly, The other three farms, *viz.* 60 acres, all arable, heavy soil ——— 60 acres all arable, light soil ——— and 50 acres, all arable, but laid to grass, are nearly upon an equality in their profit.

profit. We may, therefore, pronounce the laſt of the three, or the grazing one, to be much the beſt; as that takes up ſcarce any of the farmer's time, but leaves him for other profitable avocations; whereas the two arable ones demand not only all his time, but alſo continual hard labour.

CHAP.

CHAP. XX.

Of the difference between gentlemen and common farmers, in hiring and ſtocking farms.

WE are now come to ſuch a ſum of money as requires an equal attention to the gentleman and the farmer. In a former chapter, I hinted that a diviſion of the ſubject, for this purpoſe, would create ſuch a multiplicity of ſubdiviſions, as to throw the whole in that confuſion which often ariſes from an exceſs of method. The plaineſt way of treating this double ſubject will be to ſtate, in each chapter, firſt, the calculations for the common farmer, and then ſuch variations as ariſe between him and the gentleman; and alſo ſuch eſtimates as are peculiar to the latter.

In the execution of this deſign, I ſhall take no notice of farming for mere convenience, pleaſure, or curioſity: however entertaining, or even uſeful ſuch practices may be, there are no permanent concluſions to be drawn from eſtimates and calculations of matters guided by fancy and caprice. I ſhall hereafter conſider the point of experimental farms.

But the chief purport of this chapter is, to give my reaſons for making any diſtinction at all between gentlemen and common farmers, in huſbandry, for profit.

It is my aim, in theſe ſheets, to ſtate all circumſtances as near to the truth as poſſible. I have, in the preceding chapters, made a multitude of variations, not only according to the ſoil and number of acres, but to the wealth and ſubſtance of the farmer; becauſe ſuch cauſes are attended in the general with correſponding effects; and,

and, to carry on a calculation upon the ſame principles, for a poor as a rich man, would be evidently abſurd. I have, in every article, ſketched the profit which ſuch a farmer as I deſcribe in it *may* make, if he acts conſiſtently with his ſituation, and as a good huſbandman. When I ſuppoſe him to work hard all the year, he may, it is true, be idle half his time, but ſuch variations are rather thoſe of *reality* from my calculations, than of my calculations from reality. I ſtate what he ought to do, and what he muſt do, if he would grow rich; his not doing it is his fault, not my error. It would be abſurd to form variations to particular, and thoſe vicious, exceptions.

Now, if I was to calculate for the gentleman and the farmer upon the ſame principles, it would be acting contrary to all theſe ideas; for, in ſome inſtances, I ſhould ſtate a profit impoſſible for a gentleman to arrive at; and, in others, ſuch a balance as not one farmer in a thouſand would ever ſee at the bottom of his accounts.

Gentlemen and farmers have, in huſbandry, peculiar advantages and diſadvantages, which muſt never be confounded, if we would preſerve a clear and accurate idea of the whole ſubject.

Before I endeavour to ſtate theſe diſtinctions, it will be neceſſary to explain my expreſſion, *gentlemen farming for profit*.

There are few in whom it is a real profeſſion, buſineſs, and dependence: I wiſh there were more; as I am confident their talents would be applied to as uſeful a purpoſe to mankind in general, and to their country in particular, as if exerted in commerce, as if deſtroying the human ſpecies in phyſic, tything it in divinity, or ruining it in law.—But there are many who live in

the country upon ſmall fortunes, that engage in huſbandry with a view to improving their incomes; others, that have been educated to profeſſions they diſliked, rather than lead an idle life, ſettle in the country, and apply to farming. In any caſe, however, there is no difference between their taking a portion of their own eſtates into their hands, or hiring part of their neighbours: In one, they bargain with another man; in the other, they ſettle accounts with themſelves: And here I muſt ſuppoſe the latter as true to reality, and as fair an engagement, as the former; and admit none of thoſe deſpicable deceptions, too often met with, of rating the land at its laſt rent, or any but ſuch as it would abſolutely bring between men of ſenſe and underſtanding. I have heard of many boaſts of profit, when the rent allowed for the land is not above two thirds, perhaps, of what a neighbouring farmer would give for it.

But, whatever the motive may be for a gentleman's farming, it is certain that a diſtinction muſt be made between their profit and that of common farmers; and this for divers reaſons.

In ſmall farms we find the profit decided by the labour of the farmer; and no wonder, ſince 25 *l.* a year is the intereſt of 500 *l.* ſo that a farmer may eaſily beat a gentleman on a ſmall farm ace and deuce, as the value of his labour may be more than the whole ſum employed by the gentleman. And we ſhould remember, that there are few little farmers but what work more or leſs themſelves. In the preceding calculations, if the reader turns to any of the arable farms, and deducts from the profit the value of a man's labour, he will find but a ſcanty remainder; in many of them, none at all.

Now

Now if a little farmer, with all poſſible induſtry, finds it a matter of vaſt difficulty to make any thing by his buſineſs (independent I mean of his labour), how much more difficulty will a gentleman find, if he farms with no ſuperior advantages?

Here, I muſt own, I feel a croud of ideas, all unſuſceptible of calculation, and which will, on that account, puzzle me extremely in the enſuing chapters.

A farmer's labour is in part reducible to eſtimate, and in part not. He goes out to plough, in a little farm that keeps a pair of horſes, ſtirs his acre of land, and comes home: this labour we may value pretty tolerably, becauſe the time is much the ſame as that of a labourer. But he is maſter of four horſes and two ploughs; conſequently a man works with him:—here, at once, the affair is changed; and his labour is in part unſuſceptible of eſtimate. He not only ploughs his own acre, but *ſees* that his man does the ſame; and if the horſes of the latter move quicker than his own, ſo that his acre (we will ſuppoſe) is done the ſooneſt, the farmer ſees and remedies it; he finds, at once, that his man has ſkimmed the ſurface, inſtead of ploughing it; he gently rebukes him at firſt, but takes eſpecial care that the abuſe is not repeated.——He is ploughing in ſeed-time, or in any other buſy ſeaſon;—the weather is precarious;—clover to be ſown;—harrowing to be done only while the land is dry, and rain expected;—or, in a word, a thouſand circumſtances of the ſame ſort. He thinks it a great benefit to plough an acre;—IT IS DONE.—Why ſhould the man, or labourer at plough with him, object to it? If they are not employed at that work, they will upon ſome other, and perhaps a more laborious one; they are not afraid of a want of time

to take care of their horſes; the farmer does that work all himſelf. In a word, his only conſideration is his horſes; if he overworks them, he feeds them in proportion, and ſo the matter ends.

Now, paſs the hedge of this farm, and enter that of a gentleman, who thinks, like the farmer, that as the ſeaſon is fine he ſhould make good uſe of it, and get his barley-ſeed into the ground as faſt as poſſible; he therefore allows his horſes each two pecks of corn more in a week, and better chaff: — Will his work be done? — Not it.—He does not take care of his own horſes, but his man, labourer, horſe-keeper, or what not, who will take, he may be aſſured, plenty of time to attend the horſes; which is but a matter of idleneſs, and goſſiping in the ſtable. He will be told that the cuſtom of the country is to plough but an acre a day: that that quantity is done; that there would not be time ſufficient to take care of the horſes, if more was done:—that Bald wants a ſhoe—that the chaff muſt be got home from the barn — that the hay is done—and, in ſhort, a million of trivial excuſes—mere evaſions, but which will be too powerful for him to conquer, manage as he pleaſes.

In harveſt or hay-time, a farmer who drives his own horſes will clear twice the ground that a gentleman's ſervant will do.

In carting dung, clay, marle, &c. &c. let the gentleman and the farmer compare notes; whoſe tally will have the moſt notches?—It is filled perhaps by the load; the farmer drives away his:—the gentleman is purſuing a fox; or reading by his fire-ſide;—whoſe loads will contain the faireſt meaſure?

Bad weather comes, too wet to employ the horſes: let the gentleman remark what ſort of a day's

day's work he has on ſuch occaſions done by his horſe-keeper.

Perhaps the farm is ſituated within reach of town-dung; the weather is too wet to plough; the farmer harneſſes his horſes, and goes for a load of manure. What do the gentleman's horſes?

Some hay or ſtraw is bought; the diſtance will admit of going about twice a day, with tolerable diligence: We well know what the farmer will do: Can you ſay the ſame of the gentleman?

After the horſes are taken care of, ſome cattle require being looked to—let to water—&c. &c. &c. The farmer certainly will not neglect ſuch a buſineſs. The gentleman's man is abſent:—where is he? no body knows.—He appears. "Well—and where have you been?"—"At the "blackſmith's, Sir, with this plough-ſhare!"

At the end of the year, the gentleman and the farmer review their accounts; the firſt finds a farrier's bill as long as his London taylor's.—The other has been his own phyſician. The firſt is ſurprized at his neighbour's *luck*; but, without being accuſed of enchantment, he might conclude his anſwer, as the Roman farmer did, *meas vigilias et ſudores*. But the ſweat of the ſervant was probably employed more in abuſing than curing his maſter's horſes.

It would be endleſs to multiply inſtances; in one word, the contraſt holds through all the work of a farm. If we could reduce it exactly to calculation, what a vaſt difference *per cent.* in profit would appear!

But although we cannot reduce the whole of theſe matters to calculation, let us attempt a few of them, upon probable ſuppoſitions: if the reader rejects the *data* upon which I build my eſti-

mates, it is but his paſſing over a page or two, and he will be never the worſe for it.

Let us ſuppoſe a farm to employ four horſes, which are kept *conſtantly* at work. This is no improbability, for I had ſix horſes, which in three years never were abſolutely idle three days, except Sundays.

Suppoſe the difference in ploughing between the farmer's plough and the gentleman's to be a quarter of an acre in a day; this I am confident is not below the mark, if we take into the account extraordinary times, when the farmer does *greatly* more than the gentleman, and alſo the difference of the ploughing; for the gentleman, moſt certainly, will not have his land ploughed ſo well as the farmer, if he has *near* the ſame quantity done. Many gentlemen are much more ſolicitous for deep ploughing than farmers, but then they aſſuredly ſuffer proportionably in quantity. Upon the whole, there can be no doubt but that a farmer who ploughs with his men will have one fourth more done, either in quantity or quality, than the gentleman. Now this, upon one article, is a difference of 25 *per cent.*

In carting dung, clay, marle, compoſts, &c. there can be no doubt but the farmer, driving his own team, and paying his labourers by the ſcore, that he may not wait for them, will carry 6 loads in 20 more than the gentleman; and if leaving work in ſlight rains, or for other unneceſſary occaſions, and alſo the difference of meaſure, that is of ſeeing every cart fairly filled, be taken into the account, I have no doubt but the whole difference amounts to ſeven in twenty.

Again, in hay-time and harveſt, the farmer driving his own team will forward all the carting-work ſo much, that I think little diſpute will be made

made of his clearing 30 acres as ſoon as the gentleman does 20.

In all carting, where it is a point whether the waggon goes once or twice a-day, the difference between the farmer and the gentleman is juſt 50 *per cent.*

The numerous ſmall articles of work done at home, ſuch as carting ſtubble, wood, herdles, turnips, ſtraw, hay, (in winter) &c. &c. will be all *infinitely* in favour of the farmer; and, for a very plain reaſon, he will croud them together, and make out a complete day's work; whereas the gentleman's ſervants will divide them yet more, to have the more broken idle loitering days. I rate this article at 70 *per cent.*

Thus we find the difference between the gentleman's horſes and the farmer's, in theſe few articles of work, to be very great. In ploughing, 25 *per cent.* in carting manure, 35 *per cent.* in carting in hay-time and harveſt, 66 *per cent.* in carting, whether one or two journeys a-day, 50 *per cent.* in ſundry ſmall articles, 70 *per cent.*

The three firſt of theſe articles include the principal work of the year; but I will take the laſt into the account, as it is not ſo high as one of the reſt. The average of theſe rates is 44 *per cent.* But then the proportion of the quantity of each work is not taken into the account.

1. Suppoſe hay and harveſt to employ the horſes - - - *Weeks*,	6
2. Carting, (whether one or two journeys a-day) - - -	2
3. Such articles as the gentleman is in reſpect of time on an equality with the farmer, ſuch as carrying corn to a diſtance, and a few others, - -	3
4. Sundry ſmall articles at home of carting,	4
Carry over,	15

Brought over,	15
5. Carting manure, - -	5
6. Ploughing, harrowing, rolling, &c. that are in the ſame proportion as ploughing,	32
	52

N° 1. is $\frac{3}{26}$ths. 4 is a 13th.
2. is a 26th. 5. is a 13th and $\frac{1}{52}$d.
3. is a 14th. 6. is $\frac{3}{13}$ths.

Now to bring theſe matters to a deciſive point, we muſt calculate the expence of 4 horſes, and the labour attending them. Two men muſt, in nineteen inſtances out of twenty, be abſolutely engaged; and in numerous ones, ſuch as ſeed-time, manuring, harveſt, &c. three, four, five, and even ſix men. However to avoid any imputation of partiality, I will ſuppoſe the labour of only three men to be guided in their work by the horſes *. As both the gentleman and farmer has the option of either ſervants or labourers, we will ſuppoſe the former, and value their wages, board, waſhing and lodging, at 20*l.* a year each; the total of this article, therefore, is 60*l.*

The expence of horſes is various, riſing from 5*l.* a year to 15*l.* but as there are not many farmers ſo high as the latter ſum, I will ſuppoſe it 10*l.* which (conſidering the great breadth of land aſſigned them in my calculations) is under rather than over the mark: Four, at this rate, come to 40*l.* total 100*l.* This ſum divided in the above proportions, will appear as follows.

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* There are many inſtances where only 2 men are *kept* to 4 horſes, but I ſuppoſe the horſes, [not as in common] to be aſſigned to a proper quantity of land.

N° 1.

N° 1.	-	$\frac{3}{26}$	-	£	10	11	0
2.	-	$\frac{1}{26}$	-		3	10	4
3.	-	$\frac{1}{14}$	-		7	2	10
4.	-	$\frac{1}{13}$	-		7	13	10
5.	-	$\frac{1}{13}$ and $\frac{1}{52}$	-		9	12	3
6.	-	$\frac{8}{13}$	-		61	10	8
			Profit,	£.	100	0	11

The eleven-pence is a fraction, but the error too slight to be worthy of remark.

The difference *per cent.* of the work, as before laid down, will be as follows.

N° 1.	-	-	£.	10	11	0	*l.*	*s.*	*d.*
66 *per cent.* on it.	-			6	19	3			
							17	10	3
2	-	-		3	10	4			
50 *per cent.*	-			1	15	2			
							5	5	6
3.	-	-	Equality,				7	2	10
4.	-	-		7	13	10			
70 *per cent.*	-			5	7	8			
							13	1	6
5.	-	-		9	12	3			
35 *per cent.*	-			3	7	3			
							12	19	6
6.	-	-		61	10	8			
25 *per cent.*	-			15	7	8			
							76	18	4
Total, and the average difference, 32 *l.* 17 *s. per cent.*			£.	132	17	11			

That there is this difference between the work of four horſes in a farmer's hands, who drives them himſelf, and a gentleman's, I am well convinced; but if we conſider the vaſt importance of catching ſeaſons, particularly in ſeed-time, harveſt,

harveſt, and hay-time, any one muſt be ſenſible that the difference of gain and loſs is prodigious, and beyond the power of calculation. Whole crops, in a manner, depend on it: How often do we ſee no other diſtinction in thoſe of ſpring corn, but the fields ſown late or early; a point often ſufficient to balance every other *, and in which the farmer has all the chances on his ſide. And theſe conſiderations are ſo very important, that they ſhould influence us to increaſe the difference, were I not fearful of lanching too far into ideal eſtimates. Nor have I taken into the account the difference the farrier makes in it, nor ſome other articles that would, if reduced to ſo much *per cent.* run it up much higher.

I ſhould obſerve, that the *proportion* between the farmer and the gentleman is the great thing in this calculation; for that holds equally good whether horſes coſt 5 *l.* a year or 10 *l.* or whether the expence of a ſervant be 20 *l.* or 30 *l.* In this reſpect the above ſuppoſed 100 *l.* is a mere imaginary ſum; an algebraic ſign, identically nothing but the means of drawing forth the *proportion*. In ſeveral parts of the kingdom with which I am acquainted, it is pretty near the truth; it was therefore as well to uſe it as one more imaginary ſtill.

Here then we find a ſingle branch of buſineſs, in which the farmer, who drives his own team, is ſuperior to the gentleman above 32 *per cent.* Now if there were no other points in which they

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* We do not, however, think with the old proverb of the Roman farmers, *vetus eſt agricolarum proverbium naturam ſationem ſæpe decipere ſolere, ſeram nunquam quin mala ſit*, but the very contrary.

varied,

varied, would it not alone be a juſtification for my not conſidering them in the ſame light? But there are other points, not to be overlooked.

The labour of a farm is performed by either ſervants or day-men; in this caſe it matters not by which. I ſhould be glad to know, who is moſt likely to have a good day's work done by his men, (beſides the three employed directly with the team, and before calculated) the farmer or the gentleman? Or, in other words, which is among them moſt, the farmer who drives his horſes in all their work, or the gentleman?

Much work is done by the piece; who will get it cheapeſt?

It is a fact, and I believe every where indiſputable, that labourers will work cheaper for common farmers than for gentlemen; and much of this is obſervable in day-work, even where the prices are more ſettled than they can be in piece-work.

Suppoſe, in day-work, either by working harder or fairer hours, the farmer gets but one hour's labour in a day more than a gentleman: this, if you lay aſide the breakfaſt and dinner, amounts to near 10 *per cent.* upon all the labour of a farm, excluſive of three men with the team.

I ſuppoſed the team to work 52 weeks; but a part of the year it ſtands ſtill; this is no impeachment of my calculation, which was to diſcover proportions, not quantity. If we ſubſtitute 26 weeks, inſtead of 52, there will be no difference in the 32 *per cent.* nor in any of the concluſions.

The other loſs therefore upon common labour, unconnected with the team, amounts to more than the *reſiduum*, after deducting three men; as thoſe three will often be commonly employed: And what compariſon can there be in the uſe of the

the farmer to himſelf, when the team is idle, and the gentleman's ſervant to him?

The ſtrong idea I have of the truth of theſe reflections, makes me confident that I am *far* under the mark.

Again, if the farmer has ſervants, they eat and drink with him, nor is it in their power to waſte any thing, while all is under his or his wife's eye;—nor can they carry out his victuals, to ſell it to the labourers. How ſtands this caſe with the gentleman? He boards his men at full 100 *per cent.* dearer than the farmer. If his men are honeſt, they will not cheat him in the ſmall matters of the kitchen;—but does he not depend, for this, on their honeſty?—What is the ſituation of him who depends on the honeſty of others?—Not that of the farmer I have ſtated.

But theſe, cries a gentleman, are trifles not worth conſidering; if farming is able to do any thing, it will ſurely overbalance ſuch matters as theſe.—Very true; gentlemen do think them trifles; but if they weigh their *farming* purſe at the end of the year, they will find even ſuch trifles have a wonderful efficacy in lightening it. They may be trifles compared to the whole amount of their income or expences; but theſe have nothing to do with *farming*. Let them calculate the proportion between ſuch ſums, and the intereſt or profit of the capital they employ in huſbandry: they will, after ſuch a compariſon, no longer call them trifles.

It certainly may be ſaid, and with very great juſtice by men of fortune, that they farm for amuſement—for the benefit of keeping horſes—for advantages in houſe-keeping, &c &c. &c. and that ſuch an attention as the farmers give would be impoſſible in them; and, if poſſible, at leaſt intolerable: that they had rather be hanged than

than be at ſuch trouble, for the ſake of a paltry profit. I join with them entirely in all theſe ſentiments; but then let them forbear boaſting of their profit, and not, as many do, inſiſt they *make money* by it.

To return: If we take into the account all theſe complicated diſadvantages, we ſhall find that 12 *per cent.* upon labour is a very low calculation of the gentleman's diſadvantages. I cannot heſitate thinking that it amounts to above 20 *.

In the ſelling the produce of the farm: — but, hold! the gentleman employs a bailey: — that indeed is a new matter, and muſt not be paſſed over.

I apprehend it will be thought that the wages, board, &c. &c. of a bailey cannot be eſtimated at leſs than 50 *l.* If he is one that does not work hard himſelf, and there are very few ſuch, it may be ſomewhat lower; but a ſervant that is entruſted more than the common ones, in the very nature of his office, deſires much higher wages, and expences of all kinds, than inferior ones. — 20 *l.* a year is the loweſt pay that I am acquainted with, even for a working bailey, that ſells the corn, &c. and his board, waſhing, lodging, uſe of a horſe pretty often, &c. &c. cannot amount,

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* In the ſucceeding chapters, theſe calculations muſt be uſed in various forms, ſometimes as a total expence *per* team, and at others all thrown into labour; in the latter I calculate the total of theſe differences 32 *per cent.* in one caſe, and 12 in the other at 27. Minute accuracy, as I have often obſerved, is not only uſeleſs, but impoſſible, if it were ever ſo uſeful.

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in any gentleman's family even of ſmall fortune, to leſs than 20*l.* more.

Now, if 40*l.* or 50*l.* a year be divided into ſo much *per cent.* on the capital employed in huſbandry, the remedy, in any but a very large farm, will be found worſe than the diſeaſe.—But is it a *remedy?* Will the employing a bailey bring all the preceding articles of diſadvantage to a par with the farmer?—Far from it; there is a great difference between a man acting for himſelf, and for another:—beſides, baileys do not drive the team; and very few of them even plough, ſo that there will be nearly the ſame reaſons for the workmen and horſes being ſlack in their work under the bailey, as under the maſter;—ſuppoſing, I mean, he is perfectly honeſt, and conſiders his maſter's intereſt as his own.

But how are we to reduce the honeſty of the bailey to calculation? This ſurpaſſes all our art; but a few conjectures may not be unprofitable. I have ſcarce ever been in any county without finding the knavery of baileys, hinds, agents, &c. &c. &c. a common ſubject of diſcourſe among farmers; which, though no proof, is yet a ſtrong preſumption. Nor is it to be wondered at, for they are uſually people of very low birth and education, who have ſcarce any ideas of honour and juſtice, but controuled by fear alone; and the nature of their employment laying them open to a multiplicity of temptations, it would be aſtoniſhing if they continued totally uncorrupt. Honeſty, in that rank of people, is nothing but ſituation; if they are concerned merely for themſelves in buying and ſelling, and other buſineſs of the ſame ſort, they habitually become accuſtomed to that common ſort of honeſty which keeps them in decency;—but move the ſame man into another ſphere, in which he touches

touches much money of another perſon's, without moſt regular accounts of it, he will as habitually become a rogue — God forbid I ſhould hazard a *general* aſſertion, that *all* baileys are rogues; I am ſpeaking rather of the nature of the buſineſs, than the characters of the men: If that has a regular tendency to corrupt its profeſſors, the *chances* are undoubtedly againſt them.

The probability of the bailey's not being honeſt, muſt therefore be left to the reader's idea; I ſhall only conjecture a few of the ill conſequences.

In a farm where a bailey is kept, the buying and ſelling every thing paſſes through his hands; if not, what is he kept for? We may ſuppoſe a gentleman would not be at the expence of one for nothing; or to truſt his own judgment, when he pays another for having a better. If we reflect on the ſale of corn, cattle, hay, &c. &c. and the buying of ſeed-corn, hay, ſtraw, horſes, lean cattle, &c. &c. &c. and much of both, unavoidably, tranſacted with people that can only make a mark, or at fairs, where even no mark is made; in ſuch a conduct of buſineſs opportunities to be diſhoneſt, and with impunity, muſt unavoidably be numerous. — But, at all events, let the ſuppoſition be ſtated as it will, all mankind muſt allow the farmer to have much the advantage, who tranſacts all ſuch buſineſs himſelf, and in no inſtance truſts to the honeſty of others.

But another circumſtance, not to be forgot, is the judgment and knowledge of the bailey: The very employing him is a proof that the gentleman depends not on his own; and the difficulty is, the diſcerning whether the ſervant's knowledge is ſufficient to ſupply the defects of the maſter's. A man who finds the judgment of a bailey of uſe to him, moſt certainly knows too little

little of the practice of huſbandry, to diſcover when he is well or when ill ſerved: Conſequently the whole of his buſineſs may ſuffer, through the ignorance of the bailey, and the gentleman know little of the matter.

I pretend not to reduce ſuch complicated contingent matters to calculation; but my readers, I apprehend, will allow me that, in all theſe points, the common farmer has a v ſt ſuperiority to the gentleman one—Let us now be equally fair and impartial in ſtating the other ſide of the queſtion, and conſider the circumſtances in which the gentleman has the advantage of the farmer.

Throughout theſe ſheets, I attempt to ſtate the account of every farm, with an eye not only to the land itſelf, but alſo to ſuch circumſtances of the man who occupies it; ſuch as his ſubſtance, houſe-keeping, furniture, &c. In the ſame manner, variations muſt be made between the *practice* of gentlemen and that of common farmers. Their ſuperiority in general knowledge, in reading, and obſervation, *may* be of uſe to them in farming, and demand as much to be carried to their account as the ſuperior induſtry, common knowledge, and attention of the farmers entered to theirs.

If there are any new diſcoveries in huſbandry —or if beneficial practices, common in one part of the kingdom, are to be introduced to another, the benefit of ſuch have nothing to do with the farmer; becauſe, we may be certain that he, from habit and confined views, will have nothing to ſay to them. But the gentleman, with more enlarged ones, may be ſuppoſed to reap advantages in this field.

Here it may be ſaid, that ſuch advantages are very ideal—ſpeculative—and uncertain;—and,

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in many caſes, much more unprofitable and pernicious than beneficial:—But, in anſwer to this, I obſerve, that ſuppoſing the objection true, yet it no ways impeaches the propriety of conſidering it as a *capability* in favour of the gentleman; it is true, he may apply it to his prejudice, but is that any argument againſt it? The farmer may carry his frugality into avarice, and deny his farm the neceſſary expences of tillage and manure; but are we therefore to forbear calculating upon the *general* ſuperiority of his frugality? It is univerſally allowed, that we ought not to reject a practice in morals, politicks or trade, merely becauſe it is *capable* of being pernicious. In the ſame manner, we are not to reject, from the gentleman's account, the advantages I have mentioned, becauſe he may apply them to his deſtruction:——that is not the fault of thoſe ſuppoſed advantages, but in a want of judgment in the individual who makes the application.

That there are numerous inſtances of the kind in queſtion, wherein the gentleman may be ſuppoſed vaſtly ſuperior to the farmer, a very little attention will diſcover. A few inſtances may be named in a moment.

Suppoſe the gentleman to live in a country wherein turnips are commonly cultivated, but none hoed: He finds, in turning over his books, that hoeing is a common practice in many counties, and prodigiouſly advantageous,——takes the hint, and hoes his own: Is it not extremely evident, that he will make much money by ſuch a practice?

In the ſame manner, clover is unknown in a country, though paſture of all kinds is extremely ſcarce——Will a common farmer introduce it? Moſt aſſuredly not: But a gentleman, from his

ſuperiority of general knowledge, may be ſuppoſed to do it, and will indubitably reap the benefit.

A country may contain fine tracts of ſandy loam, highly proper for carrots, and yet not one to be found: may not the gentleman, from his reading introduce this excellent root? And is it not as clear that he will find the culture greatly profitable?

A clay country may be ſo uniform in heavy land, as not to be capable of producing a ſingle turnip or carrot to advantage, to the great loſs of the farmer, who cannot keep good ſtocks of cattle for want of plenty of winter food; now, on ſuch land, cabbages are cultivated to infinite profit, even ſuperior to what is any where received from turnips:——The gentleman is the perſon who can alone be ſuppoſed to introduce ſuch a practice, not the farmer.

Another tract of country may be totally deficient in paſturage, from the dryneſs of the ſoil, or from other cauſes: Sainfoine and lucerne are in ſuch, and numerous other caſes, to be uſed to prodigious benefit;—but the common farmer will have nothing to ſay to either of them, if not common among his brethren.——Theſe inſtances might be multiplied to infinity; and certainly form a very conſiderable weight in the gentleman's ſcale

That judgment is neceſſary in ſuch introductions, I moſt readily agree: A gentleman animated with reading books of huſbandry may form viſionary ideas of digging in more fertile mines than thoſe of Peru or Mexico, if he does but purſue the directions of ſome writers:—he may then ſow carrots in a clay-ſoil, and plant cabbages on a ſandy gravel: he may introduce ſainfoine on weeping clays, and lucerne in bogs:

there

there is no doubt theſe blunders may be made; but theſe are not thoſe which are moſt to be feared

In the ſame page, perhaps, in which he finds carrots, lucerne, clover or turnips, ſenſibly recommended, he may alſo find as warm a character of the drill-huſbandry in general, for all ſorts of vegetables—of tranſplanting turnips for a crop—of buying 100 ſows at once to fat their pigs on clover—of digging to the centre of the earth in ſearch of fertility—of manuring land with boiled lupines;—in a word, of an hundred rhodomontade inſtructions, ſufficient to ruin a Nabob. Here judgment ſhould come in play, to reject the improbable from that which is rational—the chaff from the corn. Without this judgment, what I have ſtated as an advantage certainly may prove an evil.—But then this is the mere abuſe of a circumſtance not inherent in it.

I have no doubt but a gentleman with a tolerable underſtanding, and ſome practical knowledge of agriculture, may, by the means here recited among others, more than balance all the advantages of the farmer, great as they undoubtedly are—but, without making uſe of ſuch, I think it is impoſſible:—he can never fight the farmer with his own weapons. For this reaſon, I ſhall in the enſuing calculations, aim at diſplaying the conſequences both of neglecting this precaution and profiting by it.

Upon the whole, there can be no doubt but diſtinctions of conſequence exiſt between gentlemen and common farmers, in the whole practice of agriculture; and if ſo, it is certainly neceſſary for me to make a diſtinction between them in the point of ſtocking farms, as the ſum requiſite to

hire one, in every inſtance, depends on the practice to be followed.

And my principal endeavour will be to ſhew in what manner gentlemen, by farming upon improved methods, may equal the natural advantages of the common farmers; which, with reſpect to the former, will be attended with much more uſe than calculations, in which they are reckoned nearly on an equality with them. Their diſadvantages, in that method, are ſo prodigiouſly great, and ſo unſuſceptible of calculation, that if I was only to reckon 32 *per cent.* on horſes, and 12 *per cent.* on other labour, I ſhould, take the whole buſineſs through, be full 20 *per cent.* above the truth: If all the numerous diſadvantages of the gentleman, in common huſbandry, be conſidered, one cannot reckon his general profit ſo great as that of the farmer by at leaſt one third, or 33 *per cent.* and this for calculation. *In fact*, I am perſuaded it is, in one caſe, a reality, but in the other an imagination, or worſe,—a loſs.

Suppoſing it was a point capable of proof, I would bet any wager within the compaſs of my fortune, that no gentleman in England, by common management, upon a farm fairly ſtated as to rent, and all accounts clear and ſatisfactory, made within 40 *per cent.* of the profit of a good neighbouring farmer. If I had ſaid 50 or 60 *per cent.* I do not think I ſhould have exceeded the mark,—grazing farms excepted.

Some farmers (in middling farms) do little more work themſelves than gentlemen. Such partake of both the claſſes I have ſtated; they have, however, the advantage of the latter in attending more to their buſineſs; and the gentlemen of them in that enlarged knowledge I before mentioned.

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In the ſucceeding chapters, as in the preceding, I ſuppoſe nothing but excellent huſbandry; and rational conduct, reſpecting the number of horſes.

There will be many variations in the future, which are not to be found in the preceding pages, and ſome which I muſt paſs without explanations. To explain every thing, would alone fill a volume; the reader muſt either have ſome dependance on me, that I ſhall not run into uſeleſs ones, or he would wade through perpetual explanatory paſſages: I ſhall, however, omit none which are really neceſſary.

There will be ſome places in which I ſhall appear inconſiſtent with the preceding chapters, but if the difference between the ſubſtance of the men is taken into the account, many ſuch places will not be at all puzzling.

I proceed to the calculations, only begging the reader, once more, not to judge too critically of each ſeparately; my grand deſign may be anſwered without ſuch minute accuracy; and although a farmer may meet with many rates that vary from his country, yet the alterations may be eaſily and quickly made, and the accounts uſed by any man for any farms, when all the principal heads which ſhould be in his memory, at ſo critical a time, are ſtated to his view:—— he need not, in ſuch a ſituation, forget any, nor hire a farm in the dark, while every point he ſhould reduce to calculation lies before him: but the rates I have uſed, I believe, will not be found far from the medium of many counties.

CHAP. XXI.

Of the moſt advantageous method of diſpoſing of from five to ſix hundred pounds in farming.

THE method to be purſued in this and the ſucceeding chapters will be to ſtate, firſt, the ſtocking by common farmers; and then that by gentlemen, which will be no more than a review of the former, with deductions in one caſe, and alterations in the other.

N° 1.

Eighty Acres all arable, the ſoil clay or loam, and laid down to graſs.

Stock.

Rent, &c.

Rent, of 80 acres, at 18 *s.* -	£.	72	0	0
Tythe, at 4 *s.* -		14	8	0
Rates, &c. &c. at 4 *s.*		14	8	0
			100	16 0

Implements.

2 Carts, -	£.	18	0	0
A plough, - -		1	11	6
Harrows, - -		2	0	0
Roller, - -		1	10	0
Harneſs for 3 horſes, -		4	0	0
Screen, buſhel, fans, ſieves, &c. &c. -		5	0	0
Sacks, - -		2	0	0
Dairy furniture, -		2	0	0
			36	1 6
Carry over, £.		136	17	6

Brought over, £. 136 17 6

Live ſtock.

3 Horſes, -	£. 40	0	0
7 Cows, - -	35	0	0
1 Sow, - -	1	0	0
			76 0 0

Seed and tillage.

4 Earths on 20 acres of wheat land, -	£. 16	0	0
Seed, - -	12	0	0
Sowing, - -	0	10	0
Water-furrowing, -	1	0	0
2 Earths on 15 acres of barley-land, - -	6	0	0
Seed, - -	7	10	0
Sowing, - -	0	3	9
Water-furrowing, -	0	7	6
One earth on 5 acres of oat land, - -	1	0	0
Seed, - -	2	10	0
Sowing, - -	0	1	3
Water-furrowing,	0	2	6
Seed clover, 20 acres, and ſowing, - -	4	5	0
			51 10 0

Labour.

The amount of this cannot be calculated exactly by preceding farms, as there is no analogy between this and any of them; the beſt method of calculating it is to eſtimate it in the lump at one man's labour the year round; as

Carry over, £. 264 7 6

Brought over,	£. 264	7	6
this is not an annual account, accuracy is not of ſo much importance: Suppoſe, - -	£. 25	0	0

Wear and tear, &c.

Shoeing, -	£. 2	0	0		
Wear and tear, -	5	0	0		
Houſe-keeping, -	10	0	0		
Furniture, - -	10	0	0		
				27	0	0
			£.	316	7	6

Produce of the firſt year.

20 Acres of wheat, -	£. 80	0	0
15 Of barley, - - -	45	0	0
7 Cows, - - - -	21	0	0
	£. 146	0	0

The farmer got through his firſt year; we muſt next inquire into the ſecond.

Expences.

Rent, &c. - -	100	16	0
Seed for 20 acres of wheat, -	12	0	0
Seed for 20 acres of ſpring corn,	10	0	0
Ditto 20 of graſſes, - - -	20	0	0
Labour, - -	25	0	0
Shoeing, and wear and tear, &c. &c.	17	0	0
	£. 184	16	0

Produce.

20 Acres of wheat, -	£. 80	0	0
16 Ditto of barley, - -	48	0	0
7 Cows, - - - -	35	0	0
	£. 163	0	0

Expences,

Expences, - - - - -	184	16	0
Produce, - - - - -	163	0	0
	21	16	0
Intereſt of ſtock, - -	17	14	0
Loſs, - - - £.	39	10	0

This ſecond year the fields are, 20 acres of wheat, 20 of ſpring corn with graſſes, 20 of clover, and 20 fallow. The third year's account will be as follows:

Expences.

	l.	*s.*	*d.*
Sundries, as the laſt year, except the whole ſeed being ſpring-corn,	182	16	0
20 Acres more graſſes, -	20	0	0
£.	202	16	0

Produce.

36 Acres of barley, - £.	108	0	0
5 Cows ſold off, - - -	25	0	0
2 Ditto produce, - - -	10	0	0
15 Acres of graſs mown for hay, 15 loads at 30*s.* ſtacked on farm,	22	10	0
£.	165	10	0

Expences, - - -	202	16	0
Produce, - - - -	165	10	0
	37	6	0
Intereſt of ſtock, - - -	19	13	0
Loſs, - - - £.	46	19	0

The fields, this third year, are cropped with 20 acres of ſpring corn and graſs: 20 of graſs, a new lay; and 20 fallow. The fourth year's account will be as follows:

Expences.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	100	16	0
Seed for 20 acres of ſpring corn,	10	0	0
Ditto of graſs-ſeeds, - -	20	0	0
Labour—aſſiſtance in mowing, and making, and ſtacking 40 acres of graſs in hay, will amount to	10	0	0

Sundry articles.

Shoeing, - - - - -	£. 1	10	0
Wear and tear, - -	2	10	0
Houſe-keeping, - - -	10	0	0
25 Heifers, - - -	75	0	0
	£. 229	16	0

Produce.

16 Acres of barley, - -	£. 48	0	0
40 Loads of hay, - -	60	0	0
2 Cows, - - - -	10	0	0
25 Fat heifers, - - -	125	0	0
	£. 243	0	0

Of implements there are now to be ſold, what coſt, -	£. 34	1	6	
And 2 horſes, -	26	0	0	
	£. 60	1	6	
Suppoſe they bring - -				40 0 0
				£. 283 0 0
Expences, - - -				229 16 0
				53 4 0
Intereſt of ſtock, - - -				22 17 0
Profit, - - -				30 7 0

The

The Annual Account will be:

Expences.

Rent, &c. - - -	100	16	0
Shoeing, - - -	0	12	0
Houſe-keeping, - - -	10	0	0
50 Perches of ditching, and hire of carts, &c. to carry the earth on to the land, - -	5	15	0
100 Home-bred heifers, - -	300	0	0
£.	417	3	0

Produce.

100 Fat heifers, - -	500	0	0
2 Cows, - - -	10	0	0
£.	510	0	0
Expences, - - - -	417	3	0
	92	17	0
Intereſt of ſtock, - -	29	13	0
Profit, - - - £.	63	4	0

General Account of theſe four years.

The firſt ſtock, - - £.	316	7	6
Product of the firſt year, ſhort of the expences of the ſecond, -	38	16	0
Product of the ſecond year, ſhort of the expences of the third, -	39	16	0
Carry over, £.	394	19	6

Product

	Brought over,	£.	394	19	6
Product of the third year, ſhort of the expences of the fourth, -			64	6	0
Product of the fourth year, ſhort of the expences of the fifth, &c.			134	3	0
Which total is the ſum neceſſary to ſtock this farm, - -		£.	593	8	6

With a gentleman this account will ſtand thus:

	Stock.				
Rent, &c. as before, -		£.	100	16	0
Implements, ditto, - -			36	1	6
Live ſtock, as before, - -			76	0	0
Seed and tillage, ditto, -			51	10	0
Labour: This article before was 25 *l.* or one man's; but as the gentleman does nothing himſelf, we muſt ſtate the account thus:	£. 25 0 0				
Another man, -	25 0 0				
	£. 50 0 0				
* 27 *per cent.* on this,	13 10 0				
			63	10	0
	Carry over,	£.	327	7	6

* See the note, page 189: As the expences of horſes are not in this eſtimate thrown by themſelves, the difference in labour and horſes, between the gentleman and farmer, are thrown together, and charged under the article labour: not as an abſolutely accurate ſum, but one very moderately calculated, and to ſhew that ſome allowance of this nature ſhould in private eſtimates be made.

Sundry

Brought over, £. 327 17 6

Sundry articles.

Shoeing, - -	£. 2 0 0		
Wear and tear, -	5 0 0		
		7 0 0	
		£. 334 17 6	

Produce of the firſt year.

This the ſame as before *, £. 146 0 0

Second year's account.

Expences.

Rent, &c. - - -	100 16 0	
Seed (the ſame as the farmer) -	42 0 0	
Labour, - - -	63 10 0	
Sundries, - - -	7 0 0	
	£. 213 6 0	

Produce.

The ſame, - -	£. 163 0 0	
Expences, - - -	213 6 0	
Produce, - - -	163 0 0	
	50 6 0	

* The product of cows comes into this article: Now this is very different between a gentleman and a farmer,—indeed infinitely ſo;—— but as the farmer reaped beſides advantages from his dairy, and as I allow the gentleman none, nor charge his ſwine to account, this will ſomewhat balance the account between them.

Intereſt

Brought over,	£. 50	6	0
Intereſt of ſtock, - - -	20	1	0
Loſs, - - -	£. 70	7	0

Account of the third year.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	100	16	0
Seed for 40 acres of ſpring-corn,	20	0	0
Seed for graſſes, - - -	40	0	0
Labour, - - -	63	10	0
Sundries, - - - -	7	0	0
	£. 231	6	0

Produce.

The ſame, - - -	£. 165	10	0
Expences, - - - -	231	6	0
Produce, - - -	165	10	0
	£. 65	16	0
Intereſt of ſtock, - - -	23	9	0
Loſs, - - - -	£. 90	5	0

Account of the fourth year.

Expences.

Rent, &c. - -				£. 100	16	0
Seed for 20 acres of ſpring-corn,				10	0	0
Ditto of graſs ſeed, - -				20	0	0
Labour; farmer's,	£.	10	0			
Add, - -		10	0			
	£.	20	0			
27 *per cent.* on it, -		5	8			
				25	8	0
Carry over,				£. 156	4	0

Shoeing,

Brought over,	£. 156	4	0
Shoeing, and wear and tear, -	4	0	0
25 Heifers, - - - -	75	0	0
	£. 235	4	0

Produce.	*l.*	*s.*	*d.*
The ſame, - - -	283	0	0
Expences, - - -	235	4	0
	47	16	0
Intereſt of ſtock, - -	26	18	0
Profit, - - -	£. 20	18	0

The ANNUAL ACCOUNT.

Expences.

Rent, &c. - - -	£. 100	16	0
Shoeing, - - -	0	12	0
Ditching and carts, , - -	5	15	0
100 Home-bred heifers, -	300	0	0
	£. 407	3	0

Produce.

The ſame, - -	£. 510	0	0
Expences, - - - -	407	3	0
	102	17	0
Intereſt of the ſtock, - -	33	4	0
Profit, - - -	£. 69	13	0

GENERAL

GENERAL ACCOUNT.

Firſt ſtock, - - -	£. 334	17	6
Produce of the firſt year, below the expences of the ſecond, -	67	6	0
Produce of the ſecond year, below the expences of the third, -	68	6	0
Produce of the third year, below the expences of the fourth, -	69	14	0
Produce of the fourth, below the expences of the fifth, &c. -	124	3	0
Which total is neceſſary for this farm, - - -	£. 664	6	6

Thus we find, according to this account, a gentleman ſhould have above 70*l.* more than a farmer, to ſtock 80 acres of arable land to be laid down to graſs. But allowances in favour of the latter, in matters unſuſceptible of calculation, ſhould be made in the mind of the reader: Perhaps, 100*l.* would be near the truth; but this is a mere conjecture.

I have ſuppoſed the one to buy as cheap and ſell as dear as the other: —— a large ſuppoſition at leaſt.

The ſuperiority of the gentleman, in annual profit, ariſes from the circumſtance of houſekeeping: It was certainly proper to charge that to the farmer: but it would be as improper to charge it to the gentleman, whoſe farm I ſuppoſe totally unconnected with his houſe: but this is a new advantage in favour of the farmer, for with the aſſiſtance of the farm before us, and the ſum of

of 10*l.* with what his family may earn, he and they are all maintained:——ſuch an eſtimate would be wide of the truth with a gentleman, but then the omiſſion of the 10*l.* in his account, forms ſo much a greater balance to the farmer. This caſe is a difficulty, and an unavoidable one, in theſe eſtimates.

If we ſuppoſe the gentleman's houſe-keeping to receive ſome advantages from the farm; yet thoſe of the farmer will be proportionably larger, beſides the 10*l.*

To paſs over the difference of this 10*l.* would be to allow a palpable error to run through ſeveral of the ſucceeding accounts. The way in which I think it may be beſt remedied, will be to ſtate both the farmer's and gentleman's account; the one with ſuch an allowance, the other without it;—but, in the *compariſon*, to deduct the ſum allowed to the farmer for houſe-keeping, from the amount of the gentleman's profit; this will throw them ſo far upon an equality.

According to this account, the gentleman's profit, on the farm before us, will be 59*l.* 13*s.* *per annum.* The largeneſs of which is owing to the farm being all graſs, in which the gentleman has no peculiar diſadvantages, any more than the farmer, as no labour is wanting.

N° 2.

Variation the first.

Sixty acres, all arable, the soil clay or loam, and laid down to grass.

Stock.

Rent, &c. &c. as in N° 1.			
Ch xix. - - -		£. 75 12	0
Implements, ditto, - -		34 6	6
	£.	109 18	6

Live stock.

3 Horses, -	£. 36 0	0	
2 Cows, - -	10 0	0	
1 Sow, - -	0 15	0	
		46 15	0

Seed and tillage.

Four earths on 15 acres of wheat land, - -	12	0	0
Seed, - -	9	0	0
Sowing, - -	0	7	6
Water-furrowing, -	0	15	0
Two earths on 10½ acres of barley land, -	4	4	0
Seed, - -	5	5	0
Sowing, - -	0	2	7½
Water-furrowing, &c.	0	5	3
One earth on 4½ acres of oat land, - -	0	18	0
Seed, - -	2	5	0
Sowing, - -	0	1	1½
Water-furrowing, -	0	2	3
		35 5	9
Carry over,	£.	191 19	3

Labour.

Brought over,	£. 191	19	3

Labour.

This quantity of land, all tillage, in N° 1. took in labour 32 *l.* 10 *s.* 9 *d.* but 13 *l.* 3 *s.* of it were for the bean and clover crops, which I therefore deduct, - -	19	7	9
Sundry articles, as in N° 1. -	25	16	0
	£. 237	3	0

The firſt year, the crops are 15 acres of wheat, and 15 of ſpring corn; and the other 30 fallow. The produce of which is,

15 Acres of wheat, -	£. 60	0	0
10½ Of barley, - - -	31	10	0
2 Cows, - -	10	0	0
	£. 101	10	0

The ſecond year, 30 acres are fallow, and 30 of ſpring corn, with graſſes amongſt it. The account as follows.

Expences.

Rent, &c. - -	£. 75	12	0
Seed for 30 acres of ſpring-corn, -	15	0	0
Ditto, graſſes, - -	30	0	0
Labour, - - -	19	7	9
Sundry articles, - -	15	16	0
	£. 155	15	9

Produce.

25½ Acres of barley, -	£.	76	10 0
2 Cows, - - -		10	0 0
	£.	86	10 0
Expences, - -		155	15 9
Produce, - - - -		86	10 0
		69	5 9
Intereſt of the ſtock, - -		14	1 0
Loſs, - - -	£.	83	6 9

The third year 30 acres will be in graſs, and 30 in ſpring-corn, with graſſes amongſt it. The account as follows.

Expences.		*l.*	*s.*	*d.*
Rent, &c. - -		75	12	0
Seed for 30 acres of ſpring corn,		15	0	0
Ditto, ditto of graſſes, - -		30	0	0
Labour as before, £. 19 7 9				
Add for hay-making, 6 0 0				
		25	7	9
	£.	145	19	9

Sundry articles.

Shoeing, - - £.	1	0	0
Wear and tear, -	1	10	0
Houſe-keeping, -	10	0	0
	12	10	0
£.	158	9	9

Produce.

Produce.

25½ Acres of barley, -	£.	76	10 0
2 Cows, - - - - -		10	0 0
30 Acres of hay, 1 load *per* acre, at 30 *s.* in the ſtack, - -		45	0 0
		131	10 0
Expences, - - - - -		158	9 0
Produce, - -		131	10 0
		26	19 9
Intereſt of ſtock, - -		17	3 0
Loſs, - - - - -	£.	44	12 9

The fourth year it is all graſs, half mown and half fed with heifers: The account as follows:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	75	12	0
Mowing, making, and ſtacking 30 acres, the aſſiſtance, -	8	0	0
Shoeing and houſe-keeping, -	10	12	0
37 Home-bred heifers, -	111	0	0
£.	205	4	0

Produce.

30 Tons of hay as before, -	£.	45	0 0
2 Cows, - - -		10	0 0
37 Fat heifers, - - -		185	0 0
Sale of implements and 2 horſes; they coſt 56 *l.* 6 *s.* 6 *d.* -		30	0 0
Carry over,	£.	270	0 0

Brought over,	£. 270	0	0
Expences, - - -	205	4	0
	64	16	0
Intereſt of ſtock, - -	21	7	0
Profit, - - -	£. 43	9	0

The fifth and ſucceeding years it will be graſs, and all fed: The account thus:

Expences.

Rent, &c. - -	£. 75	12	0
Shoeing and houſe-keeping, -	10	12	0
75 Heifers, - -	225	0	0
Hire of carting for ditch earth,	5	0	0
	£. 316	4	0

Produce.

2 Cows, - - -	10	0	0
75 Fat heifers, - -	375	0	0
	385	0	0
Expences, - - -	316	4	0
	68	16	0
Intereſt, - - - -	24	13	0
Profit, - - -	£. 44	3	0

And the general account of ſtock is as follows:

The original ſum, -	£. 237	3	0
The firſt year's produce below the ſecond year's expences, by	54	5	9
Carry over,	£. 291	8	9

The

	Brought over,	£.	291	8	9
The ſecond year's produce below the third year's expence -			71	19	9
The third year's produce, below the fourth year's expence, -			73	14	0
The fourth year's produce, below the fifth year's expence, -			46	4	0
Sum total requiſite for this farm,		£.	483	6	6

It is to be remarked, that although this ſum is neceſſary to have in command, yet it is not all wanting at firſt, conſequently parts of it may remain at intereſt; that is, the farmer need not call in his money faſter than he wants it; and this progreſſion of intereſt on the ſtock is calculated throughout this eſtimate, as well as others.

The gentleman's account of this farm will be as follows:

Stock.

Rent, &c. the ſame,				£.	75	12 0
Implements, ditto, -		-			34	6 6
Live ſtock, ditto, -		-			46	15 0
Seed and tillage, ditto, -		-			35	5 9
Labour; before, -	19	7	9			
Add one man, -	25	0	0			
	£. 44	7	9			
27 *per cent.*	11	0	0			
					55	7 9
Shoeing, - -		-			1	16 0
Wear and tear, -		-			4	0 0
				£.	253	3 0

Produce of the firſt year.

The ſame, - - -	£.	101	10 0

Account of the ſecond year.

Expences.

Rent, &c. - - -	£.	75	12 0
Seed, - - -		45	0 0
Labour, - - -		55	7 9
Shoeing, &c. - - -		5	16 0
	£.	181	15 9

Produce.

The ſame, - -	£.	86	10 0
Expences, - - -	£.	181	15 9
Produce, - - -		86	10 0
		95	5 9
Intereſt of ſtock, - -		16	13 0
Loſs, - - -	£.	111	18 9

Account of the third year.

Expences.

Rent, &c. - - -				£.	75 12 0
Seed, - - -					45 0 0
Labour: before,	£.	25	7 9		
Add, - -		25	0 0		
	£.	50	7 9		
27 *per cent.* -		13	10 0		
					63 17 9
Carry over,				£.	184 9 9

Shoeing,

Brought over,	£. 184	9	9
Shoeing, and wear and tear, -	2	10	0
	£. 186	19	9

Produce.

The ſame, - -	£. 131	10	0
Expences, - - -	186	19	9
Produce, - - - -	131	10	0
	55	9	9
Intereſt of ſtock, - -	21	13	0
Loſs, - - -	£. 77	2	9

Account of the fourth year.

Expences.

				l.	*s.*	*d.*
Rent, &c. - - -				75	12	0
Labour: before,	£. 8	0	0			
Add, - -	8	0	0			
	£. 16	0	0			
27 *per cent.* -	4	10	0			
				20	10	0
Shoeing, and wear and tear, -				2	10	0
37 Heifers, - -				111	0	0
				£. 209	12	0

Produce.

	l.	*s.*	*d.*
The ſame, - - -	270	0	0
Expences, - -	209	12	0
	60	8	0
Intereſt of ſtock, - - -	25	11	0
Profit, - - -	£. 34	17	0

The

The ANNUAL ACCOUNT.

Expences.

	£.	s.	d.
Rent, &c. - -	75	12	0
Shoeing, and wear and tear, -	2	10	0
75 Heifers, - - -	225	0	0
Labour for ditching, - -	10	0	0
Hire of carts, - -	5	0	0
	£. 318	2	0

Produce.

	£.	s.	d.
The ſame, - -	385	0	0
Expences, - - -	318	2	0
	£. 66	18	0
Intereſt of ſtock, - -	28	0	0
Profit, - - -	£. 38	18	0

GENERAL ACCOUNT.

	£.	s.	d.
Firſt expence in ſtock, -	£. 253	3	0
Firſt year's produce below the ſecond year's expences by -	80	5	9
Second year's produce below the third year's expences by -	100	9	9
Third year's produce below the fourth year's expence -	78	2	0
Fourth year's produce below the fifth year's expence, -	48	2	0
Total neceſſary for this farm,	£. 560	2	6

The

The profit upon theſe two farms, both to the farmer and gentleman, is conſiderable; and much greater, every thing conſidered, even to the farmer, than the ſame quantity of arable land would yield: but, to the gentleman, the difference is immenſe, as we ſhall preſently ſee.

If he keeps a bailey upon the laſt farm, who coſts him 40*l* a year, the loweſt he can be rated at, that ſingle expence more than ſwallows up all the profit of the farm. If he does the ſame on the former farm, he will receive but 19*l*. profit.

N° 3.

Variation the ſecond.

One hundred acres, all arable, the ſoil clay or loam.

Stock.

Rent, &c.

100 acres, at 17 *s.*	£. 85	0	0	
Tythe, at 4*s.* -	17	0	0	
Rates, &c. &c. at 4 *s.*	17	0	0	
				119 0 0

Implements.

One waggon, -	£. 25	0	0	
2 Carts, -	20	0	0	
2 Ploughs, -	3	3	0	
1 Pair of harrows,	2	10	0	
2 Rollers, -	3	0	0	
Harneſs for 4 horſes,	6	0	0	
Screen, buſhels, forks, rakes, &c. &c.	8	0	0	
20 Sacks, -	3	0	0	
Dairy furniture, -	3	0	0	
				73 13 0
Carry over,	£. 192	13	0	

Live

Brought over, £. 192 13 0

Live Stock.

4 Horſes, - -	60	0	0
10 Cows, - -	50	0	0
1 Sow, - -	1	0	0
			111 0 0

Seed and tillage.

4 Earths on 25 acres of wheat land,	£. 20	0	0
Seed, - -	15	0	0
Sowing, -	0	12	6
Water-furrowing, -	1	5	0
2 Earths on 16½ acres of barley land, -	6	12	0
Seed, - -	8	5	0
Sowing, - -	0	4	1½
Water furrowing,	0	8	3
One earth on 8½ acres of oat land, -	1	14	0
Seed, - -	4	5	0
Sowing, - -	0	2	1½
Water-furrowing, -	0	4	3
Clover-ſeed, 25 acres,	5	0	0
Sowing, - -	0	6	3
Harrowing, -	1	5	0
			65 3 6

Labour.

I make a variation here from any of the preceding farms: With this quantity of land as it is neceſſary to calculate the whole labour of the farm into one ſum, from

Carry over, £. 368 16 6

Brought over,	£.	368	16	6
which, a deduction of one man's labour may be made for the farmer, if he works, and no deduction if he does not, *viz.*				
25 Acres of wheat, ploughed ſix times, at 1 *s. per* acre, -	£.	7	10	0
One harrowing, at 1 *d.*		0	2	1
Sowing, -		0	12	6
Water-furrowing, -		1	5	0
Weeding, -		1	5	0
Reaping and harveſting, at 6 *d.* - -		7	10	0
Thraſhing the crop, 3 quarters *per* acre, at 2 *s.*		7	10	0
Carrying it out 10 quarters at a time, 1 day each time, of 2 men, call it, - -		0	16	0
25 Acres of ſpring corn, ploughed 3 times,		3	15	0
Three harrowings, -		0	6	3
Sowing, - -		0	6	3
Water-furrowing, -		0	12	6
Rolling, at $\frac{1}{2}$ *d.* -		0	1	$0\frac{1}{2}$
Mowing and harveſting at 4 *s.* - -		5	0	0
Thraſhing the crop, 4 quarters *per* acre, at 1 *s.*		5	0	0
Carrying out $16\frac{1}{2}$ acres of barley, 4 quarters *per* acre, 12 quarters at a time; 1 day, of 2 men,		0	10	0
Carry over,	£.	42	1	$7\frac{1}{2}$	368 16 6

Sowing

Brought over,	£.	42	1	7½	368	16 6
Sowing 25 acres of clover,		0	6	3		
25 Acres of beans, ploughed 3 times, -		3	15	0		
Sowing, - -		1	5	0		
Water-furrowing twice,		1	5	0		
Ploughing between the rows three times; twice reckoned equal to one ploughing, -		1	17	6		
Hand-hoeing once,		6	5	0		
Reaping and harvesting, at 7 *s.* - -		8	15	0		
Thrashing the crop, 3 quarters *per* acre, at 1 *s.*		3	15	0		
Carrying out 9 quarters at a time, 1 day, 4 men,		0	16	0		
Chopping and raking 25 acres of wheat stubble, at 1 *s.* 6 *d.* -		1	17	6		
Carting ditto to farm-yard 4 days work, 2 men,		0	8	0		
Mowing and making 7 acres of clover into hay,		1	8	0		
Loading, carting ditto home, and stacking, 4 days work of 6 men, at 1 *s.* 4 *d.* -		1	12	0		
Ditching 200 perches, at 1 *s.* -		10	0	0		
The old ditch, if filled up, may be made 4 feet wide at top, 3 feet deep, and 18 inches wide, at bottom, for the above price, but if it is of any size, then 5 feet by						
Carry over,	£.	85	6	10½	368	16 6

4. In

Brought over,	£.	85	6	10½	368	16 6
4. In either caſe there will come out of it 3 loads of earth *per* perch, or 600 loads, half of theſe to be carted into the farm-yard; 20 loads a day are 15 days, 3*d.* a load the filling and 1*s.* 3*d.* the man driving, at 6*s.* 3*d.* a day,		4	13	9		
I calculate the 14 head of cattle will make of the ſtraw 12 loads of dung each, or 168 loads; for mixing theſe and the earth under them well together by turning over once, 468 loads, at 1*d.*		1	19	0		
Filling and ſpreading theſe 468 loads, at 3*s.* a ſcore, or day, and 1*s.* 3*d.* *per* day the man driving away: call it 24 days, at 4*s.* 3*d.* -		5	2	0		
Cutting 40 buſhels of chaff *per* week for the horſes, ſuppoſe 2 months, as the reſt of the crop will do for the reſt of the winter, 320 buſhels, at ½*d.*		0	13	4		
Carting home the faggots which ariſe in the ditch, ſuppoſe 2 days 2 men		0	4	0		
Carry over,	£.	97	18	11½	368	16 6

Brought over,	£.	97	18	11½	368	16 6
20 Days employed in bringing manure from the neareſt town, 1 load a day; 2 men- -		2	0	0		
Sundry ſmall articles of labour, ſuch as cleaning out hogs, bringing up the cows, going of errands, frighting vermin, &c. &c. &c. theſe will be beſt eſtimated by ſuppoſing them to amount to the pay of a boy at 6 *d.* a day, -		9	0	0		
		108	18	11½		
Suppoſe the farmer earns,		15	0	0		
					93	18 11½

Sundry articles.

Shoeing, - -	£.	2	8	0	
Wear and tear, -		15	0	0	
Houſe-keeping, -		20	0	0	
Market expences,		3	0	0	
20 Loads manure, at 5 *s.*		5	0	0	
					45 8 0
					508 3 5½
Caſh in hand to anſwer incidental expences, - -					50 0 0
					£. 558 3 5½

There

There are numerous variations in this account from the preceding ones, which it would be endleſs to explain particularly, but ſome deviations are too ſtrong to be paſſed over.

Rent.

This article I have ſunk a little, as the farm increaſes in ſize: — not, however, that this is to be a maxim, for it will not hold long.

Implements.

It was neceſſary, as I allowed four horſes to the farm, to charge a waggon; the purchaſing that implement ſhould always depend on the number of horſes. The reſt of the articles under this head are increaſed in price ſomewhat in proportion to the buſineſs of the farm.

Live ſtock.

Where four horſes are kept, it is abſolutely neceſſary that they ſhould be good ones: ——— more ſo by far than when only two or three are the number, as a waggon ſhould be employed at all leiſure times in the carriage of manures, which cannot be done to advantage unleſs the horſes are ſtrong ones.

Sheep would have been, in many reſpects, a much more advantageous ſtock for ſuch a farm than cows; but then the article of *manure* required that the ſtraw of a farm ſhould be conſumed on it, as much dung is thereby raiſed; which, upon an arable farm, can only be done by cows, for beaſts will not fat on clover. If the farm is ſituated where cattle can be had at joiſt in the ſtraw yard, that way of conſuming

the ſtraw will be more advantageous than by cows.

Seed and tillage.

I throw this farm, like the preceding ones of the ſame kind, into four parts; one is cropped every year with wheat; another with beans in drills for fallow; the third with ſpring-corn; and the fourth with clover. The ſpring corn I divide into barley and oats; of the latter enough to feed four horſes, and the quantity I calculate as follows. I ſuppoſe them to be fed with corn through the months of October, November, December, January, February, March, April, and May; there is no ſort of occaſion (nor is it ever done as I at preſent know) to give a horſe oats while he is in good clover. Through thoſe months, that is 34 weeks, I allow the four 8 buſhels a week, or 272 buſhels; which, at 4 qrs. per acre, are $8\frac{1}{2}$ acres.

As to the crops which I have ſuppoſed, they are, I am confident, ſuch as cannot be objected to, being rather below than over the truth; for the manuring I ſuppoſe is certainly conſiderable; 20 loads of good town-aſhes or dung, and all the ditch-earth ſo well managed, if they do not produce ſuch crops as I have ſketched, will yield nothing.

Labour.

This article muſt neceſſarily vary greatly in different places, but the prices I have ſuppoſed cannot be very far from the truth: I think I have omitted no work of conſequence upon ſuch a farm, nor inſerted any which is uſeleſs. The care of the horſes I ſuppoſe to come into every account; for inſtance, ploughing I call a ſhilling an

an acre, but then in that ſhilling is included the afternoon employed about the horſes: I charge this work at 1 *s. per* acre, becauſe in ſummer more than an acre may be done in a day:——— however, here is ſcarce any ſummer ploughing, conſequently that price cannot be objected to.

The hay of 7 acres of clover I ſuppoſe to be ſufficient for the cows and horſes. With the aſſiſtance of the ſtraw of the crop, one cannot eſtimate the quantity at leſs than 20 tons; and the 18 acres are undoubtedly ſufficient for their ſummer food.

There are ſeveral eſtimates and calculations in this article of labour, which it was neceſſary to make in order for rendering it ſufficiently comprehenſive: I can only ſay they are ſuch as my experience beſt juſtifies.

I do not charge the total of a man's labour even to the farmer, at more than 15 *l.* As I ſuppoſe him to favour himſelf ſomewhat, and never do any work but with his horſes, we muſt drop the ſuppoſitions of hard labour in proportion as we advance in ſubſtance; but no alteration is thence to be made reſpecting the ſuperiority over the gentleman, becauſe this 15 *l.* will undoubtedly be thrown into ſuch works as will have moſt efficacy in keeping the horſes well employed; the farmer will take care and favour himſelf in ſuch as are leaſt prejudicial. However, this is but a ſuppoſition, and it remains in the farmer's breaſt to give the whole of his time; whereas it is by no means at the option of the gentleman to do the ſame.

Sundry articles.

Wear and tear I have proportioned to the farm as nearly as I am able; and houſe-keeping is increaſed, that the eſtimate may be the nearer to truth. Market expences are added for the firſt time; in like manner, others may hereafter ariſe; for it is ſo in real buſineſs: we find expences, in one rank of farmers, unknown to others below them.

It is neceſſary upon the whole of this farm to remark (and the obſervation is applicable to many of the preceding ones) that no good farmer would keep the whole of his farm in tillage, for fear of failure of the clover crop, which, though not common, yet does now and then happen; he would, for this reaſon, have 4 or 5 acres in graſs of his own laying in caſe of ſuch an accident, but ſo ſmall a variation is not of conſequence enough to take into this account. And I know ſeveral farms that have not one acre, depending entirely upon clover, nor did I ever hear of a diſappointment. The caſe is, ſuch dependance makes the farmer more than commonly attentive to this crop; he manures the field well, never ſows it but with a firſt crop, and on land in excellent order; when ſuch management is practiſed, failures will very ſeldom be heard of. I have remarked this frequently, and I believe it is the ſame with all crops.——— We next come to the annual account of this farm.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	£. 119	0	0
Seed for 25 acres of wheat, -	15	0	0
Carry over,	£. 134	0	0

Ditto

Brought over,	£. 134	0	0
Ditto 25 acres of ſpring-corn,	12	10	0
Ditto 25 of clover, - -	5	0	0
Ditto 25 of beans, - -	10	0	0
Labour, - - - -	93	18	11½
Sundries, - - -	45	8	0
	£. 300	16	11½

Produce.

25 Acres of wheat, 3 qrs. *per* acre,			
75 qrs. at 48 *s* -	£. 180	0	0
16½ Acres of barley, 4 qrs. *per* acre,			
66 qrs. at 16 *s*. - -	52	16	0
25 Acres of beans, 3 qrs. *per* acre,			
75 qrs. at 32 *s*. - -	120	0	0
10 Cows, - - - -	50	0	0
	£. 402	16	0
Expences, - - - -	300	16	11½
	101	19	0½
Deduct intereſt of ſtock, -	27	18	0
Profit, - - -	£. 74	1	0½

This profit is not inconſiderable, but it is not ſo great as thoſe would expect, who give into the common but vulgar notion, that a farmer makes a rent after all expences are paid; which I do not think is ever done in common, when land is let to its value. The crops are very conſiderable, and ſuch as no ſlovenly or moderate farmers ever reap, let their land be as good as it may; but which, with the huſbandry I have ſuppoſed, is not rated too high.——We will next enquire into the particulars of this farm in a gentleman's hands.

Variation the third.

Stock.				l.	s.	d.
Rent, &c. as before,				119	0	0
Implements,	-	-		73	13	0
Live ſtock,	-	-		111	0	0
Seed and tillage,	-	-		65	3	6
Labour, -	£. 108	18	11½			
27 *per cent.* -	29	8	0			
				138	6	11½

Sundries.

Wear and tear,	£. 17	8	0			
Manure, -	5	0	0			
Market, -	3	0	0			
				25	8	0
Caſh in hand to anſwer incidental expences, -		-		50	0	0
				£. 582	11	5½

ANNUAL ACCOUNT.

Expences.	l.	s.	d.
Rent, - - -	119	0	0
Seed, - - - -	42	10	0
Labour, - - -	138	6	11½
Sundries, - - -	25	8	0
	£. 325	4	11½

Produce.

	Produce.	*l.*	*s.*	*d.*
The ſame,	- - -	402	16	0
Expences,	- -	325	4	11½
		77	11	0½
Intereſt of ſtock,	- - -	29	2	0
		£. 48	9	0½

The reader cannot be too often reminded that there is ſome degree of fallacy in the remainders of ſuppoſed profit, at the bottom of the gentleman's accounts: and this of ſuch a kind as not to admit of remedy, from the impoſſibility of reducing it to calculation. The farmer, as before explained, has ſo many advantages in common huſbandry over the gentleman, that it is very improbable he ſhould be equalled in produce at ſo ſmall an additional expence as 32 *per cent.* in one article only. However, the reader may eaſily judge that the remaining 48 *l.* may very quickly diſappear, if the management is not equal to the farmer's; — if the gentleman is cheated — or if he employs a bailey, it will ſoon be ſwallowed up.

COMPARISON.	*l.*	*s.*	*d.*
Gentleman's ſtock, - -	582	11	5½
Farmer's ditto, * - -	538	3	5½
Superiority of the latter, -	44	8	0

* Houſe-keeping deducted, as before remarked.

Profit of the farmer, * -	94	1	0½
Ditto of the gentleman, -	48	9	0½
Superiority of the former, -	45	12	0
Farmer's profit *per cent.* -	22	12	0
Gentleman's ditto, - -	13	4	0
Superiority of the former, -	£. 9	8	0

This ſtate of the caſe ſhews ſufficiently, that a gentleman, if he would rival the farmer upon ſuch a farm as is here ſtated, muſt have recourſe to ſomething beyond the common practice.

I ſhall not multiply caſes beyond neceſſity, but if I was to forbear to throw each farm into different views, I ſhould fail in one eſſential part of my deſign; theſe ſheets would then be of uſe to the common farmer alone: It is my buſineſs to ſhew the gentleman, as well as the farmer, how he may *beſt* diſpoſe of his money.—Here follows a calculation of another way of diſpoſing of this ſum of money, which, if he executes with ſpirit as well as prudence, will pay him much better than the common one. But as this huſbandry which I am going to propoſe requires a larger ſtock proportioned to the land than the preceding, I ſhall calculate for only 50 acres, which will amount to as large a ſum as the farmer's 100.—The ſyſtem I aim at is the culture of lucerne and cabbages; the one to feed cattle with in ſummer, and the other in winter.

I ſhould premiſe, leſt I be ſuſpected of digreſſing into imaginary huſbandry, that I ſhall ſup-

* Houſe-keeping added.

poſe

poſe nothing but what has really been executed; I ſhall more than once wiſh to ſubſtitute a ſtrong idea, inſtead of perhaps weaker facts, but it muſt not be. I ſhall, however, pay due reverence to the maxim—*What has been, may be.*

N° 4.

Variation the fourth

50 Acres, all arable, the ſoil clay or loam; upon improved principles.

Stock.

Rent, &c.				*l.*	*s.*	*d.*
Rent at 1 *l.* -	£. 50	0	0			
Tythe, at 4 *s.* -	10	0	0			
Rates, &c. 4 *s.* -	10	0	0			
				70	0	0

Implements.

2 Carts, -	£. 20	0	0			
A plough, - -	1	11	6			
Harrows, - -	2	0	0			
Roller, - -	1	10	0			
Harneſs for 2 horſes, -	3	0	0			
Screen, forks, rakes, lines, &c. - -	4	0	0			
Sacks, - -	2	0	0			
Dairy furniture, -	10	0	0			
				44	1	6

Live ſtock.

2 Horſes, -	£. 30	0	0			
12 Cows, - -	60	0	0			
12 Beaſts, - -	60	0	0			
3 Sows, - -	3	0	0			
				153	0	0
Carry over,				£. 267	1	6

Brought over, £. 267 1 6

Seed and tillage.

Four Earths on 12½ acres of wheat land, -	£. 10	0	0	
Seed, - -	7	10	0	
Sowing, - -	0	6	3	
Water-furrowing, -	0	12	6	
Two earths for 12½ acres of ſpring-corn, - -	4	6	0	
Seed, - -	6	5	0	
Sowing, - -	0	3	1½	
Water-furrowing, -	0	6	3	
4½ Acres of clover-ſeed, and ſowing, -	0	19	1½	
8 Acres of cabbage ſeed,	1	4	0	
				31 12 3

Sundry articles.

Shoeing, and wear and tear, -	£. 5	0	0	
12 Loads of ſtraw,	9	0	0	
				14 0 0

Labour.

Five earths on 8 acres of cabbage land,	£. 2	0	0	
Digging the ſeed-bed and ſowing, - -	0	3	0	
Planting at 5 *s.* -	2	0	0	
Four horſe hoeings, at 6 *d.*	0	16	0	
Two hand hoeings, at 8 *s.*	3	4	0	
Cutting the cabbages and carting home at 5 *s.*	2	0	0	
Five earths on 12 acres fallow, - -	3	0	0	
Carry over, £.	13	3	0	312 13 9

Weeding

Brought over, £.	13	3	0	312	13	9
Weeding 12½ acres of wheat, -	0	12	6			
Reaping and harveſting, at 6s. - -	3	15	0			
Thraſhing the crop, 2½ qrs. *per* acre, at 2s.	3	2	0			
Mowing and harveſting, 12½ acres of ſpring-corn, at 4s. - -	2	10	0			
Thraſhing, 4 quarters *per* acre, at 1s. -	2	10	0			
Chopping and raking 12½ acres of wheat ſtubble, at 1s. 6d. -	0	18	9			
Carting ditto to the farm-yard, - -	0	7	6			
Mowing, and making, and carting 2 acres of clover,	1	4	0			
Ditching 50 perches, at 1s.	2	10	0			
Carting ditch earth on to land, 150 loads, 12 loads a day of 3 men,	2	0	0			
Carting dung out of the farm-yard, 150 loads, 12 a day of 3 men,	2	0	0			
Turning it over, -	0	12	6			
Carting home faggots,	0	1	6			
Hollow ditching 12 acres of fallow, 32 inches deep, 4 inches wide at bottom, and 18 at top — Digging, filling up, materials, carting, &c. at 9d. a perch, 80 *per* acre, 960, -	36	0	0			
Carry over, £.	71	6	9	312	13	9

Sundry

Brought over,	£.	71	6	9	312	13 9
Sundry ſmall articles of work, -		3	0	0		
	£.	74	6	9		
27 *per cent.* -		19	11	0		
					93	17 9
					£. 406	11 6

The deſign of this farm is to have it regularly cropped with 12 acres of lucerne, 8 of cabbages, 15 of clover, 12½ of wheat, and 12½ of ſpring corn: The 12 acres which are this firſt year under fallow are deſigned for lucerne the next ſpring; but as that vegetable is by no means in perfection the firſt (or even the ſecond) year, I have ſuppoſed under half the ſtock of cattle now bought: The 12 cows it will maintain the firſt year very well; 4 acres of cabbages will (with the aſſiſtance of the ſtraw) winter-feed that number. The 12 beaſts charged are to be fatted upon the other 4 acres.

As ſo large a ſtock of cattle are kept, it is neceſſary to purchaſe ſome ſtraw every year; I have ſuppoſed 12 loads, but the more is bought, the more dung will be raiſed, and conſequently the greater crops of all ſorts. The produce of this firſt year will be as follows:

	l.	*s.*	*d.*
12½ Acres of wheat, - -	50	0	0
9 Ditto of barley, - -	27	0	0
12 Fat beaſts, - - -	84	0	0
£.	161	0	0

The

The ſecond year the land will be thus cropped in the proper order, and the account ſtand thus:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	70	0	0
12 Cows, - - -	60	0	0
8 Beaſts, - - - -	40	0	0
3 Sows, - - -	3	0	0
Seed 12½ acres of wheat ſeed,	7	10	0
Ditto 12½ ſpring corn, -	6	5	0
Ditto 5 of clover, - -	1	0	0
Ditto 12 of lucerne, - -	3	12	0
£.	191	7	0

Labour.

One earth on 5 acres of clover land, - £.	0	5	0
Three ditto on 7½ ſtubble,	1	2	6
Sowing, - -	0	6	3
Water-furrowing,	0	12	6
Weeding, reaping, harveſting, and thraſhing, as before, -	7	9	6
Two earths on 12½ acres of ſpring corn, -	1	5	0
Sowing, - -	0	3	1½
Water-furrowing, -	0	6	3
Mowing, harveſting, and thraſhing, - -	5	0	0
Chopping, raking, and carting ſtubble, -	1	6	3
Mowing, making and carting clover, -	1	4	0
Ditching and carting the earth, and mixing dung,	7	2	6
Carry over, £.	26	2	10½

191	7	0

Carting

Brought over,	£. 26	2	10½	191	7 0
Carting faggots, -	0	1	6		
Sundry ſmall articles of work, - -	3	0	0		
Labour as before on 8 acres of cabbages,	10	3	0		
Two earths on 12 acres of lucerne land, -	1	4	0		
Harrowing, - -	0	3	0		
Drilling: The expence by hand-work would be ſo great, that the only way of effecting this work, is by buying a drill-plough, 8 0 0					
Re-ſold after ſowing, - 4 0 0					
	4	0	0		
Labour, drilling at 6 *d. per* acre, - -	0	6			
Four hand-hoeings, at 6 *s.*	14	8	0		
Cutting three times, at 1 *s.* 6 *d.* - -	2	14	0		
Raking together, loading and carting home, at 1 *s.* 6 *d.* - -	2	14	0		
	£. 64	16	4½		
27 *per cent.* -	17	3	0		
				81	19 4½

Sundry articles.

Shoeing, wear and tear, and ſtraw,	14	0	0		
	£. 287	6	4½		

Produce.

Produce.	*l.*	*s.*	*d.*
12½ Acres of wheat, at 5 *l.* -	62	10	0
9 Acres of barley, - -	27	0	0
12 Cows, - - - -	60	0	0
8 Fat beaſts, - -	56	0	0
£.	205	10	0
Expences, - - -	287	6	4½
Produce, - - - -	205	10	0
	81	16	4½
Intereſt of ſtock, - - -	26	12	0
£.	108	8	4½

This firſt year of the lucerne being thus carried through with good and ſufficient culture, upon the moderate allowance of maintaining a cow *per* acre, will the next yield a ſufficient produce for 2 cows and fattening a heifer beſides, *per* acre. The 8 acres of cabbages (which I ſuppoſe to improve for ſome time) will alſo winter-feed (with the aſſiſtance of the ſtraw) the cows, and fat beſides a heifer or ſteer, *per* acre, to the improvement of 40*s*. The account of the third year will ſtand thus:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	70	0	0
8 Beaſts, - - -	40	0	0
12 Heifers, - - -	36	0	0
Seed for 12½ acres of of wheat; 12½ of ſpring-corn; 5 of clover; and 8 of cabbages, - -	15	19	0
Carry over, £.	161	19	0

Labour

			Brought over, £.	161	19 0
Labour as before on every article but lucerne,	£. 39	7	4½		
Three hand-hoeings,	10	16	0		
Four horſe-hoeings,	1	4	0		
Cutting, raking, loading, and carting, at 3*s.* five times,	9	0	0		
	£. 60	7	4½		
27 *per cent.*	16	2	0		
				76	9 4½
Sundry articles,				14	0 0
			£.	252	8 4½

Produce.	*l.*	*s.*	*d.*
12½ Acres of wheat,	62	10	0
9 Of barley,	27	0	0
24 Cows,	120	0	0
8 Fat beaſts,	56	0	0
12 Ditto heifers,	60	0	0
	325	10	0
Expences,	252	8	4½
	73	1	7½
Intereſt of ſtock,	28	19	0
Profit, £.	44	2	7½

In the fourth and ſucceſſive years ſome variations ſhould be made, for allowing for the improvement of the crops. The lucerne will be much better, conſidering that ſo large an expence in hand hoeing, beſides horſe-hoeing is allowed;

allowed, — and remembering that the ſoil is a dry ſound rich clay, the *putre ſolum*, which this vegetable delights in, it would be a low eſtimation to aſſign to each acre the feeding three cows through the ſummer, and eſpecially as many lucerne plantations, now in being throughout different parts of the kingdom, do actually yield a much greater produce: yet, to keep within bounds, and lay theſe calculations open to as few objections as poſſible, I ſhall ſuppoſe the regular produce to be feeding two cows, and fatting two ſmall heifers, which is not equal to the feeding three cows.

The cabbages alſo, as the culture improves, and the manure increaſes with the cattle, will become annually more beneficial; the wonders that have been done in ſome parts of England with this vegetable, are too much beyond any thing in the common huſbandry to allow me to ſuppoſe any imaginary gentleman fully to equal. Cabbages have been cultivated over whole fields in Yorkſhire, &c. up to 30*l.* and even 40*l.* value.——I have, in experiments not ſo large, carried their value to 10*l.* and 12*l. per* acre; nor can I eſtimate them here at leſs than 6*l. per* acre; the richneſs of the ſoil, the great expence of draining, notwithſtanding any former drains, and the thorough manuring the cabbage land gets every year. I ſhall calculate the 8 acres of cabbages to winter-feed, with the aſſiſtance of the ſtraw, the 24 cows; which is three cows *per* acre; but it is well known that an acre of cabbages will winter (with plenty of ſtraw) 6 or 8 cows, for lean cattle are only to have ſtated portions every day, inſtead of hay: I ſhall further ſuppoſe each acre of cabbages to fat 2 beaſts of 5*l.* value to 2*l.* improvement.——The clover

is partly provided for the young hogs to graze in, to bring them to a proper ſize for ſelling advantageouſly at market.——It is almoſt ſurpriſing the number a ſingle acre will ſo feed. The following and every ſucceſſive year's account will ſtand thus:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	70	0	0
16 Beaſts, - - -	80	0	0
24 Heifers, - - -	72	0	0
Seed for wheat, ſpring-corn, clover, and cabbages, - -	15	19	0
Labour, - - - -	76	9	4½
Sundry articles, - -	14	0	0
£.	328	8	4½

Produce.

12½ Acres of wheat, -	£. 62	10	0
9 Of barley, - -	27	0	0
24 Cows, - - -	120	0	0
16 Fat beaſts, - -	112	0	0
24 Ditto heifers, - -	120	0	0
£.	441	10	0
Expences, - - -	328	8	4½
	113	1	7½
Intereſt of ſtock, - - -	29	2	0
Profit, - - -	84	2	7½

GENERAL

GENERAL ACCOUNT.

First ſtock, - - -	£. 406	1	6
Produce of the firſt year, below the expences of the ſecond, -	126	6	4½
Produce of the ſecond year, below the expences of the third, &c.	46	18	4½
Produce of the third year, below the expences of the reſt, -	2	18	4½
Total requiſite to ſtock this farm, - -	£. 582	4	7½

Which ſum pays 19 *l.* 8 *s. per cent.*

COMPARISON.

Gentleman's ſtock in a common farm of 100 acres, -	£. 582	11	5½
A farmer's ditto, -	£. 538	3	5½
Gentleman's on an improved farm of 50 acres, - -	£. 582	4	7½
Profit of the farmer from 100 acres, - -	£. 94	1	0½
Ditto of the gentleman, -	£. 48	9	0½
Ditto of ditto from 50 acres,	£. 84	2	7½
The farmer's profit *per cent.* on 100 acres. - -	£. 22	12	0
The gentleman's ditto, -	£. 13	4	0
The ditto on 50 acres, -	£. 19	8	0

Upon this compariſon, it is in general to be remarked, that the ſmall farm is, in the hands of the gentleman, almoſt as advantageous as the larger one in thoſe of the farmer, which is a great difference; for if the gentleman, by means of theſe improvements, gains ſo large a produce as to pay all the diſadvantages he is charged with in compariſon with the farmer, and yet ſecures a profit nearly equal to his, and at the ſame time effects this upon half the number of acres, whereby his attention is contracted, his trouble much leſſened, and his whole buſineſs ſimplified; if he can do this, the method, undoubtedly, is much worthy attention.

I have not here *proved* that this is poſſible, becauſe I am not at preſent regiſtering experiments; but I draw up theſe calculations on the foundation of experiments which I have either made myſelf, or been acquainted with of others. All that is here ſuppoſed has undoubtedly been exceeded in real practice.

One circumſtance, at leaſt, is in favour of theſe eſtimates; the reader no where meets with marvellous relations of profit, by which a fortune is at once to be made from poſſeſſing a few hundreds: I by no means profeſs to teach any one how to make a great eſtate in a few years:—— all ſuch pretences are mere quackery. Whoever expects to make a fortune in farming from a ſmall capital, is but in a dream Fortunes may certainly be made in it; and as large as in any buſineſs, but I much queſtion whether the ſtock neceſſary is not as great as for a merchant to do it in commerce.———But of this more hereafter.

The moſt that is made in theſe three farms is 22 *per cent.*——now this muſt be reckoned but moderate

moderate profit in a buſineſs wherein ſo ſmall a ſum as perhaps 100*l.* is the *capital in trade.* Branches of traffic, in which a ſmall capital maintains a family, muſt have large profits, and 20 *per cent.* is certainly a conſiderable profit, take every profeſſion and buſineſs in one view; but by no means ſo, if only ſuch as I have deſcribed are taken into the account.——In my private opinion, no leſs profit than 20 *per cent.* ſhould be thought, in agriculture, great, or even ſufficient. There are no inſurances in farming.

It appears from the preceding compariſon, that if gentlemen think of equalling the profit of the farmer, it muſt be by expending as large a ſum of money upon half the land, and exerting his attention upon ſuch improved crops as yield a much greater profit than any common ones.

N° 5.

Variation the fifth.

One hundred acres, half graſs, and half arable, the ſoil clay or loam.

Stock.

Rent, &c.				*l.*	*s.*	*d.*
100 Acres, at 17 *s.*	£. 85	0	0			
Tythe, at 4 *s.* -	17	0	0			
Rates, at 4 *s.* -	17	0	0			
				119	0	0
Implements.						
2 Carts, -	20	0	0			
A plough, -	1	11	6			
Carry over, £	21	11	6	119	0	0

Brought over,	£. 21	11	6	119	0	0
Harrows, -	2	10	0			
Roller, - -	2	0	0			
Harneſs for 3 horſes,	3	10	0			
Screen, buſhel. forks, rakes, lines, &c. &c. &c. - -	3	10	0			
Sacks, - -	3	0	0			
Dairy furniture,	3	0	0			
				39	1	6

Live ſtock.

3 Horſes, -	£. 45	0	0			
5 Cows, -	50	0	0			
1 Sow, - -	1	0	0			
5 Steers, -	35	0	0			
55 Heifers, -	165	0	0			
				296	0	0

Seed and tillage.

4 Earths, on 12½ acres of wheat land,	£. 10	0	0			
Seed, - -	7	10	0			
Sowing, - -	0	6	3			
Water furrowing,	0	12	6			
Two earths, on 12½ acres of ſpring-corn land,	5	0	0			
Seed, - -	6	5	0			
Sowing, - -	0	3	1½			
Water furrowing,	0	6	3			
12½ Acres of clover, and ſowing, -	2	13	1½			
Harrowing, -	0	3	1½			
Two earths on 12½ acres of bean land, -	5	0	0			
Carry over,	£. 37	19	4½	454	1	6

Seed,

Brought over,	£.	37	19	4½	454	1 6
Seed, - -		5	0	0		
Sowing, -		0	12	6		
Water furrowing,		0	6	3		
					43	18 1½

Labour.

If the farmer works conſtantly, as he may be ſuppoſed to do, upon only 50 arable acres, this will amount to the ſame ſum as N° 1. chap. xviii. or 23*l.* 3*s.* 4½*d.* but we will ſuppoſe his only 15*l.*		33	3	4½		
Add for additional manuring, -		4	10	0		
					37	13 4½

Sundry articles.

Shoeing, and wear and tear, - -	£.	4	10	0		
Houſe-keeping, -		20	0	0		
Market expences,		2	0	0		
					26	10 0
	£.				562	3 0

The ANNUAL ACCOUNT.

Expences.

Rent, &c. - -	£.	119	0	0		
55 Heifers and 5 ſteers, -	£.	200	0	0		
Carry over,	£.	319	0	0		

Brought over,	£.	319	0 0
Seed for 12' acres of wheat, 12' of ſpring-corn and clover; and 12½ of beans, - -		21	5 0
Labour, - - -		7	1 4½
Sundries, - - -		26	1 0
	£.	404	8 4½

Produce.

12' Acres of wheat, -	£.	62	10 0
9 Of barley, - -		27	0 0
12½ Beans, - -		50	0 0
5 Cows, - - -		25	0 0
5 Fat ſteers, - - -		55	0 0
55 Ditto heifers, - -		275	0 0
	£.	494	10 0
Expences, - - -		404	8 4½
		90	1 7½
Intereſt of ſtock, - -		28	2 0
Profit, - - -	£.	61	19 7½

In the ſtocking of this farm I have in part conducted myſelf with an eye to the 50 acres once before inſerted; but made ſuch variations, as the different ſubſtance of the men, and the manure from more cattle made neceſſary. The 5 ſteers I ſuppoſe kept through the winter with the cows upon ſtraw, not only for increaſing the quantity of manure, but alſo for the advantage of having them ready for the ſpring graſs; and if the farmer lies advantageouſly for buying a little hay or a few turnips for them, to get them into fleſh, they will pay the better; and it is needleſs

needleſs to charge ſuch expences, as they are quite uncertain, and the return will be in proportion the larger.

A gentleman's profit, on ſuch a farm as this, muſt be ſtated differently. His account will ſtand thus:

Stock.				*l.*	*s.*	*d.*
Rent, &c. - -				119	0	0
Implements, - - -				39	1	6
Live ſtock, - - -				296	0	0
Seed and tillage, - - -				43	18	1½
Labour; — before,	52	13	4½			
27 *per cent.* -	14	0	0			
				66	13	4½
Sundries, - -				6	10	0
			£.	571	3	0

ANNUAL ACCOUNT.

Expences.

Rent, &c. - -	£.	119	0	0
55 Heifers, and 5 ſteers,		200	0	0
Seed, - - -		21	5	0
Labour, - - -		66	13	4½
Sundries, - - -		6	10	0
	£.	413	8	4½

Produce.

The ſame, - -	£.	494	10	0
Expences, - -		413	8	4½
		81	1	7½
Intereſt of ſtock, - - -		20	13	0
Profit, - - -	£.	60	8	7½

COM-

COMPARISON.

Gentleman's ſtock, -	£. 571	3 0
Farmer's ditto, - -	542	3 0
Superiority of the latter, -	£. 29	0 0
Produce of both equal.		
Profit *per cent.* of the farmer,	£. 19	11 0
Ditto of the gentleman, -	14	3 0
Superiority of the former, -	£. 5	8 0

Nº 6.

Variation the ſixth.

One hundred acres, all graſs, the ſoil clay or loam.

Stock.

Rent, &c.

Rent of 100 acres, at 20*s.* -	£. 100	0	0		
Tythe, at 4*s.* -	20	0	0		
Rates, &c. &c. at 4*s.*	20	0	0		
				140	0 0

Implements.

One ſmall three wheeled cart, -	£. 6	6	0		
Harneſs for 1 horſe,	1	10	0		
Dairy furniture, -	1	10	0		
Spades, ſhovels, &c.	0	15	0		
				10	1 0
Carry over,				£. 150	1 0

Live

Brought over,				£. 150	1 0
Live Stock.					
1 Horſe,	- -	12	0 0		
2 Cows,	- -	10	0 0		
1 Sow,	- -	0	15 0		
125 Home-bred heifers,		375	0 0		
10 Steers,	-	70	0 0		
				467	15 0
Labour.					
Ditching 200 perches, at 3 *s.* for digging, carting the earth on to land, and ſpreading it,	-	30	0 0		
Mowing, making, and carting 3 acres of hay,		1	5 0		
		31	5 0		
The farmer earns,		10	0 0		
				21	5 9
Sundry articles.					
Shoeing, and wear and tear,	- -	£. 1	0 0		
Houſe-keeping,	-	20	0 0		
Market Expences,	-	1	10 0		
				22	10 0
				£. 661	11 0

The ANNUAL ACCOUNT.

Expences.		*l.*	*s.*	*d.*
Rent, &c.	- - -	£. 140	0	0
125 Heifers and 10 ſteers,	-	445	0	0
Carry over,		£. 585	0	0

Labour,

Brought over,	£. 585	0	0
Labour, - - -	21	5	0
Sundries, - - -	22	10	0
	£. 628	15	0

Produce.	*l.*	*s.*	*d.*
125 Fat heifers, - -	625	0	0
10 Ditto ſteers, - -	110	0	0
2 Cows, - - -	10	0	0
	£. 745	0	0
Expences, - - -	628	17	0
	116	3	0
Intereſt of ſtock, - -	33	1	0
Profit, - - -	£. 83	2	0

This profit is conſiderable; but it does not ariſe from any exaggeration of produce; for ſo conſiderable a breadth and change of paſture as 100 acres allow, will enable it to ſupport a greater proportionable ſtock than a ſmaller quantity of land. The chief buſineſs of the horſe is the carting the ditch earth on to the land: that work I ſuppoſe put out to the labourer to dig the ditch, and cart and ſpread the earth, having the uſe of the horſe at 3*s.* a perch, the ſame ditch as already deſcribed. This is a method I have followed with little three wheeled carts, and found it very beneficial employment for an odd horſe. —The gentleman's account, in this farm, will be as follows:

Stock.

Stock.

				l.	s.	d.
Rent, &c.	-	-	-	140	0	0
Implements,	-	-		10	1	0
Live ſtock,	-	-		467	15	0
Labour; before,	£. 31	5	0			
27 *per cent.*	8	7	0			
				39	12	0
Sundry articles,	-	-	-	2	10	0
			£.	659	18	0

The ANNUAL ACCOUNT.

Expences.

Rent, - - -	£.	140	0	0
125 Heifers, and 10 ſteers,		445	0	0
Labour, - - -		39	12	0
Sundries, - - -		2	10	0
	£.	627	2	0

Produce.

The ſame, - -	£.	745	0	0
Expences, - - -		627	2	0
		117	18	0
Intereſt of ſtock, - -		32	19	0
Profit, - - -	£.	84	19	0

This profit is beyond doubt an object with many gentlemen: To increaſe an income 85 *l.* a year, from the employment of ſuch a ſum as 660 *l.* is no trifle to a gentleman of ſmall fortune: It is true, he is under ſo many diſadvantages in buying and ſelling ſtock, that deductions may be made in the reader's mind, but cannot be by me eſtimated; however they are not one tenth

tenth of thoſe that ſhould be made on all arable farms. The difference between them is very great: In cultivating 100 acres of graſs, the trouble and attention are ſcarcely to be mentioned, and the profit conſiderable; but, upon that quantity of arable land, both are endleſs; the profit leſs, more hazardous, and open to more deductions. Surely this ſhould caution gentlemen from having much to do with the plough in common huſbandry.

Compariſon.	*l.*	*s.*	*d.*
The gentleman's ſtock, -	659	18	0
The farmer's, - -	641	11	0
Superiority of the latter, -	£. 18	7	0
Produce equal.			
The farmer's profit, -	103	2	0
The gentleman's, - -	84	19	0
Superiority of the former, -	£. 18	3	
The farmer's profit *per cent.* -	21	1	0
The gentleman's, - -	17	15	0
Superiority of the former, -	£. 3	6	0

This difference is no conſiderable matter; an equality in common huſbandry that can no where happen but in graſs farms; and 17 *per cent.* is no trifle for any gentleman ever to make of farming.

N°. 7.

N° 7.

Variation the ſeventh.

Eighty acres, all arable, the ſoil light enough for turnips.

Stock.

Rent, &c.

Of 80 acres, at 18*s.*	£. 72	0	0	
Tythe, at 4*s.* -	14	8	0	
Rates, &c. at 4*s.*	14	8	0	
				100 16 0

Implements.

One waggon *,	£. 25	0	0	
Two carts, -	20	0	0	
Two ploughs, -	3	3	0	
Pair of harrows, -	2	10	0	
Two rollers, -	3	0	0	
Harneſs for four horſes,	6	0	0	
Sundry ſmall articles,	6	0	0	
20 Sacks, - -	3	0	0	
Dairy furniture, -	2	0	0	
				70 13 0
Carry over,	£. 171	9	0	

* I paſs many variations from ſeeming rules, without explaining the reaſons; it would be endleſs: 80 acres may be cultivated with 2 horſes and 2 carts: here I ſuppoſe 4, and a waggon beſides; but there is no contradiction in this, if we make the 2 additional horſes work well for their living;——and viewing the ſame object from different points, we ſhall the better diſcover every light and ſhade of it.

Live

Brought over,			£. 171	9	0
Live ſtock.					
4 Horſes, -	£. 60	0	0		
2 Cows, - -	10	0	0		
1 Sow, - -	0	15	0		
100 Sheep, at 16*s.*	80	0	0		
30 Heifers or ſteers,	150	0	0		
				300	15	0
Seed and tillage.					
One earth on 20 acres of wheat land, - -	4	0	0		
Seed, - -	12	0	0		
Sowing, - -	0	5	0		
Harrowing, -	1	0	0		
Water-furrowing, -	0	10	0		
Three earths on 20 acres of ſpring corn land,	12	0	0		
Seed, - -	10	0	0		
Sowing, - -	0	5	0		
Harrowing, -	1	0	0		
Water-furrowing,	0	5	0		
20 Acres of clover ſeed,	4	0	0		
Sowing, - -	0	5	0		
Two earths on 20 acres of turnip land fallow,	8	0	0		
				53	10	0
Labour.					
One earth on 20 acres of wheat, - -	1	0	0		
Sowing, - -	0	5	0		
Harrowing, -	0	5	0		
Water-furrowing, -	0	10	0		
Carry over,	£. 2	0	0	525	14	0

Weeding

Brought over,	£.	2	0	0	525	14 0
Weeding, -		1	0	0		
Reaping and harveſting, at 6 *s.* - -		6	0	0		
Thraſhing, 3 qrs. *per* acre, at 2 *s.* - -		6	0	0		
Carrying out 10 qrs. at a time, 1 day of 2 men,		0	12	0		
Three earths on 20 acres of ſpring-corn, -		3	0	0		
Sowing, -		0	5	0		
Harrowing, -		0	5	0		
Water-furrowing, -		0	5	0		
Rolling, at $\frac{1}{2}$ *d.* -		0	0	10		
Mowing and harveſting at 4 *s.* - -		4	0	0		
Thraſhing the crop, 4 qrs. *per* acre, at 1 *s.*		4	0	0		
Carrying out 12 acres of barley, 4 qrs. *per* acre, 48 qrs. 12 at a time, 1 day, of 2 men, -		0	8	0		
Sowing 20 acres of clover,		0	5	0		
Four earths more on 20 acres of turnip land,		4	0	0		
Four harrowings, -		0	6	8		
Sowing, - -		0	5	0		
Hoeing twice, 7 *s.* -		7	0	0		
Drawing the turnips and carting them, at 7 *s.* 6 *d.*		7	10	0		
Chopping and raking 20 acres of wheat ſtubble, at 1 *s.* 6 *d.* -		1	10	0		
Carting ditto to farm-yard, 3 days work of 4 men,		0	8	0		
Carry over,	£.	49	0	6	525	14 0

Brought over,	£. 49	0	6	525	14 0
Mowing and making 4 acres clover into hay twice, - -	1	12	0		
Loading, carting, and ſtacking, 3 days work of 6 men, at 1 *s.* 4 *d.*	1	4	0		
Ditching 100 perch, at 1 *s.*	5	0	0		
Carting 3 loads of earth *per* perch into farm-yard, 15 days, at 6 *s.* 3 *d.* - -	4	13	9		
12 Loads of dung each on 36 head of cattle, or 432 loads; mixing theſe and the ditch earth under them together, 732 loads, at 1 *d.* -	3	1	0		
Filling and ſpreading, 37 days, at 4 *s.* 3 *d.*	7	7	0		
Carting home faggots from the ditch, -	0	2	0		
Cutting 40 buſhels of chaff *per* week for 2 months, 320 buſhels, at $\frac{1}{2}$ *d.*	0	13	4		
80 Days employed in bringing manure from the neareſt town, 1 load a day of 2 men,	8	0	0		
Sundry ſmall articles of work: a boy at 6 *d.* a day, - -	9	0	0		
£.	89	13	7		
Suppoſe the farmer earns,	15	0	0		
				74	13 7
Carry over,				£. 600	7 7

Sundry

Brought over,				£. 600	7 7
Sundry articles.					
Shoeing, -	£. 2	8	0		
Wear and tear, -	15	0	0		
Houſe-keeping, -	20	0	0		
Market expences, -	3	0	0		
80 Loads of manure, at 5 *s.* - -	20	0	0		
30 Loads of ſtraw,	20	0	0		
Caſh in hand to anſwer incidental expences,	50	0	0		
				130	8 0
				£. 730	15 7

This ſum is in every reſpect a ſufficient one to ſtock the farm in queſtion; and is indeed ſo large from having four horſes and their attendant expences, that the crops muſt be very large to anſwer it: There never is, however, any danger in real practice, of the land not paying any expences (in reaſon) of tillage and manure. This farm is excellently managed: In the firſt place, it is thrown into the moſt advantageous of all common courſes for light ſoils; *viz.* 1. Turnips; 2. barley; 3. clover; 4. wheat. The turnip fallow is ploughed ſix times; and, after that crop, thrice more for the barley: Beſides this tillage, the manuring is very conſiderable. 732 loads of farm-yard compoſt, well mixed together; 432 of dung, and 300 of earth, that has lain all the winter under the litter, to catch and retain all the urine of the cattle: this compoſt I ſuppoſe every year to be ſpread on the turnip land, being juſt 36 loads *per* acre for it;

and a noble dreſſing it certainly is, and ſufficient without aſſiſtance to keep the whole farm in great heart, as all of it receives this manuring once in four years. But, beſides this, we have 80 waggon loads of town dung every year; which muſt be ſuppoſed mortar rubbiſh, aſhes, horſe, cow, and hog dung, and every load probably a compoſt of moſt of them; or, in other words, admirable ſtuff. Theſe 80 loads I ſuppoſe ſpread on the clover land for wheat, at the rate of 4 loads *per* acre, which for that crop (ſo apt to lodge if the land is very rich) will in this courſe of management be highly ſufficient: —— and certainly, upon the whole, we may venture to pronounce, that our farmer is as *ſure of a crop* as any one can be. We now proceed to the

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	100	16	0
100 Sheep, - - -	86	0	0
30 Heifers or ſteers, - -	150	0	0
Seed for 20 acres of wheat, 20 of ſpring-corn, 20 of clover, and 20 of turnips, - -	26	10	0
Labour, - - -	74	13	7
Sundry articles, - -	80	8	0
£.	518	7	7

Produce.	*l.*	*s.*	*d.*
20 Acres of wheat, 4 qrs. *per* acre, 80 qrs. at 40 *s.* - -	160	0	0
100 Sheep, - - -	160	0	0
Carry over, £.	320	0	0

Brought over,	£. 320	0	0
30 Fat heifers, - -	240	0	0
2 Cows, - -	10	0	0
14 Acres of barley, 5 qrs. *per* acre, 70 qrs. at 16 *s.* - -	56	0	0
	£. 626	0	0
Expences, - - - -	518	7	7
	107	12	5
Deduct intereſt of ſtock, -	36	0	0
Profit, - -	£. 71	2	5

Thoſe crops are all large, but let not the reader compare them with common ones, until he finds a farm as well cultivated —— until he finds a farmer worth 700*l.* upon a farm of 80 acres of land. —— Let it not be from hence concluded, that this is the moſt profitable method of diſpoſing of 700*l.*; that point is not ſo much the buſineſs of each ſeparate calculation, as the compariſon of all at the end of each chapter. To have given only one eſtimate, would have been a mere *ipſe dixit:* I inſert many, for the reader to judge between them as well as myſelf. The gentleman's account of this farm is as follows.

Stock.			*l.*	*s.*	*d.*
Rent, &c. -	-		100	6	0
Implements, -	-		70	13	0
Live ſtock, -	-		300	15	0
Seed and tillage, -	-		53	10	0
Labour, -	£. 89 13 7				
27 *per cent.* -	24 6 0				
			113	19	7
Carry over,		£.	639	13	7

Brought over,	£. 639	13	7
Sundry articles, - -	110	8	0
	£. 750	1	7

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	100	16	0
100 Sheep and 30 beasts, -	230	0	0
Seed, - - - -	26	10	0
Labour, - - -	113	19	7
Sundry articles, - -	60	8	0
	£. 53	13	7

Produce.	*l.*	*s.*	*d.*
The same, - -	626	0	0
Expences, - - - -	531	13	7
	94	6	5
Interest, - - -	37	10	0
Profit, - - -	£. 56	16	5

No gentleman has reason to find any fault with such a farm as this; which pays 5 *per cent.* for his money, and leaves a profit of near 57 *l.* a year. But I should here repeat my old warning; not to have him too confident in these common arable farms; for his buying and selling to so large an amount, as cheap and as dear as the common farmer, is very equivocal *in reality*.

COM-

COMPARISON.	*l.*	*s.*	*d.*
Gentleman's ſtock, - -	750	1	7
Farmer's, - - -	710	15	7
Superiority of the latter, -	39	6	0
Produce equal.			
Farmer's profit, - -	91	2	5
Gentleman's, - - -	56	16	5
Superiority of the former, -	34	6	0
The farmer's money pays him profit *per cent.* - -	17	17	0
The gentleman's, - -	12	10	0
Superiority of the former, -	£. 5	7	0

N° 8.

Variation the eighth.

Eighty acres, ſixty graſs and twenty arable, the firſt ſoil heavy, the latter light.

This farm I purpoſe ſketching, upon the plan of appropriating the whole of it to fatting cattle, to diſcover if a greater profit does not attend that kind of grazing, which is carried on through the winter as well as the ſummer upon the ſame cattle, than upon that which is done only in ſummer.

Stock.

Rent, &c.

				l.	*s.*	*d.*
Rent of 80 acres, at 1 *l.*	-			80	0	0
Tythe, at 4 *s.*	-	-	-	16	0	0
Rates, &c. at 4 *s.*	-		-	16	0	0
			£.	112	0	0

Live ſtock.

Two Horſes, -	£.	24	0	0	
30 Oxen at 10 *l.*		300	0	0	
				324	0	0

Implements.

One Cart, -	£.	9	0	0	
Harneſs, - -		4	0	0	
1 plough, - -		1	11	6	
Pair of harrows, -		2	0	0	
Roller, - -		1	10	0	
Sundry ſmall articles,		1	10	0	
				19	11	6

Seed and tillage.

Two earths on 20 acres,	£.	8	0	0	
Seed, for 20 acres turnips,		0	10	0	
				8	10	0

Labour.

Four earths more on 20 acres, -	£.	4	0	0	
Harrowing, -		0	5	0	
Sowing, - -		0	5	0	
Hoeing twice, -		7	0	0	
Drawing and carting home,		7	10	0	
Carry over,	£.	19	0	0	464	1	6

Attendance

Brought over,	£.	19	0	0	464	1 6
Attendance upon 30 head of cattle, -		1	0	0		
Ditching 100 perches,		5	0	0		
Carting the earth, 300 loads into yard; 12 a day, 25 days, 4s. 3d.		5	6	3		
Turning over 384 loads of dung, and 300 loads of earth, 684, at 1d.		2	17	0		
Filling and ſpreading 684 loads, 12 a day, at 3s. a ſcore, -	5	2	0			
57 days driving,	3	11	7			
		8	13	7		
Carting home faggots,		0	2	0		
	£.	41	18	10		
Farmer earns, -		15	0	0		
					26	18 10

Sundry articles.

Shoeing, - -	£.	1	4	0	
Wear and tear, -		2	10	0	
Houſe-keeping. -		20	0	0	
Market expences; -		2	0	0	
20 Loads of barley, or oat ſtraw, - -		15	0	0	
40 Loads of ſtubble,		16	0	0	
5 Tons of hay, -		10	0	0	
6 Qrs. of oats, -		3	12	0	
Caſh in hand, -		40	0	0	
					110 6 0
	£.				601 6 4

ANNUAL

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	112	0	0
30 Oxen, - - -	300	0	0
Turnip ſeed, - -	0	10	0
Labour, - - - -	26	18	10
Sundry articles, - -	70	6	0
£.	509	14	10

Produce.	*l.*	*s.*	*d.*
20 Fat oxen, - - -	600	0	0
Expences, - -	509	14	10
	90	5	2
Intereſt of ſtock, - -	30	1	0
Profit, - - - £.	60	4	2

The reader doubtleſs remarks, that in this account there are variations not found in any of the preceding; this farm required ſuch: for inſtance, it would by no means anſwer to this farmer, to throw his fields into a various courſe for the ſake of raiſing his own oats, which are no great quantity, as his horſes are not near employed; nor would it be worth the trouble and confuſion to alter ſo equal and correſponding an arrangement of the farm for raiſing five tons of hay: That quantity is not for the horſes alone, but to give the oxen a ſmall bundle every day with their turnips. As to the management of the beaſts, they may either be bought in the ſpring, and ſold from the turnips; or at autumn, and

and ſold from the graſs: this muſt be according to the riſe and fall of prices in the country where the farmer lives, but he ſhould be attentive to it, as ſelling his beaſts when beef is ½*d.* a pound dearer than common, will be to him a conſiderable difference. The advance upon them of doubling the original price is certainly not extravagant: It is highly requiſite that a man ſhould do that, when he keeps his oxen the year thro', and gives them turnips and hay beſides their ſtraw. The gentleman's account of this farm will be as follows:

Stock.			*l.*	*s.*	*d.*
Rent, &c.			112	0	0
Implements,			19	11	6
Live ſtock,			324	0	0
Seed and tillage,			8	10	0
Labour: before,	£. 41	18 10			
27 *per cent*	11	6 0			
			53	4	10
Sundry articles,			90	6	0
		£.	607	12	4

ANNUAL ACCOUNT.

Expences.		*l.*	*s.*	*d.*
Rent, &c.		112	0	0
30 Oxen,		300	0	0
Turnip ſeed,		0	10	0
Labour,		53	4	10
Sundry articles,		50	6	0
	£.	516	0	10

Produce.

	Produce.	*l.*	*s.*	*d.*
The ſame,	- -	600	0	0
Expences,	- -	516	0	10
		83	19	2
Intereſt,	- - - -	30	7	0
Profit,	- - - -	£. 53	12	2

This profit coming ſo near that of the farmer, is plainly owing to the ſmall quantity of arable land in the farm: but the difference will be beſt ſeen in the following

COMPARISON.	*l.*	*s.*	*d.*
The gentleman's ſtock, -	607	12	4
The farmer's, - -	581	6	4
Superiority of the latter, -	£. 26	6	0
Produce equal.			
The farmer's profit, -	80	4	2
The gentleman's, - -	53	12	2
The former ſuperior, -	£. 26	12	0
The farmer's money pays him *per cent.*	18	18	0
The gentleman's, - - -	13	16	0
The former ſuperior, -	£. 5	2	0

Having

Having thus endeavoured to ſhew what profit both the farmer and gentleman have reaſon to expect from ſuch a tract of land on a light ſoil, all arable, and alſo from a part of it graſs and a part arable, I ſhall here throw in a variation for the uſe of gentlemen alone, that the method may in this caſe be known, of one party making an intereſt at leaſt equal, if not ſuperior to the other: that gentlemen may know according to the ſoil how to apply their money to ſuch improved methods, as will give them a better profit than what the common farmer enjoys.

N° 9.

Variation the ninth.

Thirty-two acres of arable land, either all light loam; or a part light, and a part heavy loam.

This farm I propoſe being cropped with lucerne and carrots, to be jointly applied to the fatting of cattle; neither of them are very particular in their ſoils; lucerne will thrive on any that are dry, except mere ſands, and carrots on all but clayey wet loams. I may ſuppoſe, from the vaſt variety of land to be met with in moſt farms, the lucerne to be raiſed on a dry ſound ſtiff loam; and the carrots on a lighter one.

Stock.			*l.*	*s.*	*d.*
Rent of 32 acres, at 21 *s.* - -	£.	33 12 0			
Tythe, at 4*s.* -		6 12 0			
Rates, &c. &c. at 4 *s.*		6 12 0			
			46	16	0
Carry over,	£.		46	16	0

Implements.

Brought over, £. 46 16 0

Implements.

2 Small three wheeled carts, -	£.	12	12	0	
Harneſs for 2 horſes,		4	0	0	
1 Plough, - -		1	11	6	
Harrows, -		2	0	0	
Sundry ſmall articles.		2	0	0	
					22 3 6

Live ſtock.

2 Horſes, - - - £. 24 0 0

Tillage.

One ploughing on 32 acres, - £. 6 8 0

Labour.

One earth on 32 acres three times in the ſame furrows, half an acre a day, - -	£.	3	4	0	
Three common ditto,		4	16	0	
Ditching 50 perch, -		2	10	0	
Carting 3 loads *per* perch, or 150 loads, 25 a day, at 2 *d.* a load filling, and 1 *s.* 3 *d.* a day driving,		1	12	6	
Carting wood, -		0	2	0	
Sundry ſmall articles,		3	0	0	
		15	4	6	
27 *per cent.* -		4	1	6	
					19 6 0
Carry over,	£.				118 13 6

Sundry

Brought over, £. 118 13 6

Sundry articles.

Shoeing, -	£.	1	4	0	
Wear and tear, -		2	0	0	
Keeping 2 horſes a year, calculated at -		20	0	0	
				23	4 0
	£.			141	17 6

Account of the ſecond year.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	46	15	0
23 Home-bred heifers, -	69	0	0
27 Heifers or ſteers, - -	135	0	0
Seed for 9 acres of carrots, at 6*s.*	2	14	0
Ditto for 23 of lucerne, - -	6	18	0

Labour.

Two ploughings for 23 acres of lucerne land,	£.	2	6	0	
Three harrowings,		0	17	3	
Drilling: Coſt of a drill-plough,	8	0	0		
Re-ſold for,	4	0	0		
		4	0	0	
Labour in ditto, at 6*d.*	£.	0	11	6	
Four hand-hoeings, at 6*s.*		27	12	0	
Cutting 3 times, at 1*s.* 6*d.*		5	3	6	
Raking together, loading and carting, at 1*s.* 6*d.*		5	3	6	
Carry over,	£.	45	13	9	260 7 0

Seed,

Brought over,	£.	45	13	9	260	7 0
One ploughing for 9 acres of carrot land, -		0	9	0		
Sowing, - -		0	6	9		
Harrowing, - -		0	2	3		
Hoeing, at 3 *l.* -		27	0	0		
Diggi g up, at 20 *s.*		9	0	0		
Carting home, at 5 *s.*		2	5	0		
Ditching 50 perches,		2	10	0		
Carting the earth to farm-yard, - -		1	12	6		
Mixing ditto with 400 loads of dung, at 1 *d.*		2	6	0		
Carting and ſpreading the whole on the land,		6	0	0		
Carting home faggots,		0	2	0		
Sundry ſmall articles of work, including attend-ance upon the cattle,		7	0	0		
		104	7	3		
27 *per cent.* -		28	1	0		
					132	8 3

Sundry articles.

Shoeing, and wear and tear, - -	£.	3	4	0		
30 Loads of ſtraw,		20	0	0		
20 Loads of ſtubble,		8	0	0		
4 Tons of hay, -		8	0	0		
					39	4 0
					£. 431	19 3

Produce.

Produce.

23 Heifers,		£. 115	0 0
27 Steers,		216	0 0
	£.	331	0 0
Expences,		431	19 3
Produce,		331	0 0
	£.	100	19 3
Intereſt,		28	13 0
Loſs,	£.	129	12 3

ANNUAL ACCOUNT.

Expences.				*l.*	*s.*	*d.*
Rent, &c.				46	16	0
55 Beaſts,				225	0	0
Seed for 9 acres of carrots,				2	14	0
Labour on ditto as before,	39	3	0			
Three hand-hoeings of the lucerne, at 5 *s.*	17	5	0			
Four horſe-hoeings; two reckoned as one ploughing,	2	6	0			
Cutting 5 times, at 1 *s.* 6 *d.*	8	12	6			
Raiking together, loading, and carting home, at 1 *s.* 6 *d.*	8	12	6			
Ditching, carting the earth, mixing and re-carting as before,	12	10	6			
Sundry ſmall articles,	7	0	0			
£.	95	9	6			
27 *per cent.*	21	3	0			
				116	12	6
Sundry articles,				39	4	0
			£.	430	6	6

Produce.	*l.*	*s.*	*d.*
55 Beaſts, - - -	550	0	0
Expences, - - -	480	6	6
	£. 69	13	6
Intereſt, - - -	36	3	0
Profit, - - -	£. 33	10	6

The reader may poſſibly think the ſuppoſition of 9 acres of carrots and 23 of lucerne, largely calculated to fat 55 beaſts to the improvement of 5*l.* each, which is yielding a produce of 275 *l.* or better than 8*l.* an acre: but if the vaſt expence of the carrot crop is conſidered, (which riſes to about 6*l.* *per* acre) no one would think 10*l.* *per* acre too large an allowance for *that*, and the lucerne is then reckoned at 8*l.* both which prices are either *very* moderate, or theſe vegetables not worth the culture. The general account of this farm is as follows.

	l.	*s.*	*d.*
Firſt ſtock, - - -	141	17	6
Second year's expences, -	431	19	3
Produce of ditto below the expences of the third, - -	149	6	6
£.	723	3	3

Which ſum pays 9*l.* 13 *s.* *per cent.*

From the ſmallneſs of which profit, it is plain the crops ſhould be rendered proportionably more productive, or that it will not anſwer to employ ſuch large ſums of money upon ſuch ſmall tracts of land, ſo well as upon larger. Some ſituations may

may indeed render it highly beneficial; for inſtance, in the neighbourhood of great cities, for the keeping of cows; for which purpoſe both lucerne and carrots are admirably adapted.

General Recapitulation of this Chapter.

Stocks requiſite for the preceding farms.

N° 1. Eighty acres all arable, the ſoil clay or loam, and laid down to graſs, -	£. 593	8	6
Ditto a gentleman, -	£. 664	6	6
2. Sixty acres all arable, the ſoil clay or loam, laid down to graſs, -	£. 483	6	6
Ditto a gentleman, -	£. 560	2	6
3. One hundred acres, the ſoil clay or loam, all arable,	£. 558	3	5½
Ditto a gentleman, -	£. 582	11	5½
4. Fifty acres, all arable; the ſoil clay or loam: cultivated upon improved principles in cabbages and lucerne,	£. 582	4	7½
5. One hundred acres, the ſoil clay or loam; half graſs and half arable, -	£. 562	3	0
Ditto a gentleman, -	£. 571	3	0
6. One hundred acres all arable; the ſoil clay or loam,	£. 661	11	0
Ditto a gentleman, -	£. 659	18	0
7. Eighty acres all arable, the ſoil light enough for turnips,	£. 730	15	7
Ditto a gentleman, -	£ 750	1	7
8. Eighty acres; 60 graſs, and 20 arable; the firſt a heavy ſoil, the laſt light, -	£. 601	6	4
Ditto a gentleman, -	£. 607	12	4

9. Thirty-two acres of arable, the soil all light, or part of it light and part heavy land; the culture improved in carrots and lucerne, - £. 723 3 3

Annual produce of these farms, expences paid.

N° 1. - -	£. 92	17	0
Ditto a gentleman,	£. 102	17	0
2. - -	£. 68	16	0
Ditto a gentleman,	£. 66	18	0
3. - -	£. 101	19	0½
Ditto a gentleman,	£. 77	11	0½
4. - -	£. 113	1	7½
5. - -	£. 90	1	7½
Ditto a gentleman,	£. 81	1	7½
6. - -	£. 116	3	0
Ditto a gentleman,	£. 117	18	0
7. - -	£. 107	12	5
Ditto a gentleman,	£. 94	6	5
8. - -	£. 90	5	2
Ditto a gentleman, -	£. 83	19	2
9. - -	£. 69	13	6

Profit per cent. on these farms.

N° 1. - -	£. 15	13	0
Ditto a gentleman, -	£. 15	10	0
2. - -	£. 14	5	0
Ditto a gentleman, -	£. 12	0	0
3. - -	£. 18	4	0
Ditto a gentleman, -	£. 13	8	0
4. - -	£. 19	8	0
5. - - -	£. 16	0	0
Ditto a gentleman, -	£. 14	3	0

N° 6. - -	£. 17	11 0
Ditto a gentleman, -	£. 17	2 0
7. - -	£. 14	12 0
Ditto a gentleman, -	£. 12	10 0
8. - -	£. 14	19 0
Ditto a gentleman, -	£. 13	16 0
9. - - -	£. 9	13 0

Comparison between gentlemen and farmers, in their profit per cent. on the preceding farms.

	l.	*s.*	*d.*
N° 1. The farmer, -	19	14	0
The gentleman, - -	15	10	0
Superiority of the former, -	£. 4	4	0
2. The farmer, - -	19	0	0
The gentleman, - -	12	0	0
Former superior by -	£. 7	0	0
3. The farmer, -	22	12	0
The gentleman, -	13	8	0
Former superior by -	£. 9	4	0
5. The farmer, - -	19	11	0
The gentleman, -	14	3	0
Former superior by. - -	£. 5	8	0
6. The farmer, - -	£. 21	0	0
The gentleman, -	17	2	0
Former superior by -	£. 3	19	0

7. The farmer, - -	17	17	0
The gentleman, -	12	10	0
Former ſuperior by - -	£. 5	7	0
8. The farmer, - -	18	18	0
The gentleman, -	13	16	0
Former ſuperior by - -	£. 5	2	0

The progreſſion of the farmer's farms, in order of profit, is as follows:

N° 3. - -	£. 18	4	0
6. - -	£. 17	11	0
5. - - -	£. 16	0	0
1. - -	£. 15	13	0
8. - - -	£. 14	19	0
7. - -	£. 14	12	0
2. - - -	£. 14	5	0

From this little table it is obſervable, that the farmer makes better intereſt of his money from 100 acres of the clay ſoil, all arable, than from any of the reſt.

The next beneficial farm is the 100 acres all graſs.

The third, half graſs and half arable.

Next come the 80 acres of arable, laid down to graſs.

The fifth in profit is the grazing farm, 80 acres, 60 graſs, and 20 arable.

The ſixth is the 80 acres all arable, the ſoil light enough for turnips.

The laſt is the 60 acres arable laid down to graſs.

A few

A few circumſtances ſhould here be remarked. The difference between the two firſt, that is, between 100 acres all in graſs or all arable, is but 13 *s. per cent.* which may, in ſuch a calculation, be called an equality; — but this equality is in thoſe points only that are reducible to calculation. In all others the graſs farm has infinitely the advantage: The labour of the farmer is nothing; conſequently he has leiſure to apply to whatever other buſineſs he can turn to account; which, in many caſes, may be of conſiderable importance. He is alſo liable to fewer chances and accidents of evil: his profit more ſure, leſs dependant on the ſeaſons; and his whole buſineſs in every reſpect vaſtly more ſimple and eaſy. For theſe and many other reaſons, the graſs farm claims the preference, notwithſtanding the rank above aſſigned: One muſt adhere in calculations to figures, deviations unreducible to eſtimate, muſt be conſidered in another light.

The 100 acres half graſs and half arable and the 80 arable acres laid down to graſs, are likewiſe on a par; that is but 7 *s. per cent.* difference. For the preceding reaſons, the latter is the moſt beneficial.

The three laſt farms are alſo upon an equality; one 80 acres, 60 graſs, and 20 arable; one all arable; and the other 60 arable, laid down to graſs. The laſt certainly the beſt.

The variations, in the ſum required to ſtock theſe farms, are ſome of them pretty conſiderable; theſe do not affect the profit *per cent.* but muſt be regarded in the enquiry, *what ſum is requiſite for ſuch a farm?* To have ſquared the calculations ſo as each ſum might have been the ſame, might have been done; but the eſtimates would not have been ſo genuine, nor would the propor-

tions between the methods on a given number of acres, appear near ſo dear as at preſent; a point which is not a little uſeful.

18*l.* 4*s per cent.* which is the greateſt profit made in any of theſe farms is not conſiderable; not ſo much indeed as I think it ought to be; but this ſcale of farms I do not think ſo profitable in themſelves as the ſucceeding ones; but herein I may be miſtaken.

The progreſſion of the gentleman's farms, in the order of profit, is as follows:

N° 4.	- -	£. 19	8 0
6.	- - -	£. 17	2 0
1.	- -	£. 15	10 0
5.	- - -	£. 14	3 0
8.	- -	£. 13	16 0
3.	- - -	£. 13	8 0
7.	- -	£. 12	10 0
2.	- - -	£. 12	0 0
9.	- -	£. 9	13 0

From this ſcale it is very apparent that the 50 arable acres cultivated in cabbages and lucerne, are much the moſt beneficial farm, even more advantageous than 100 acres of graſs, which is ſecond.

Eighty acres all arable, but laid down to graſs, come next; and are a freſh proof of the great benefit of graſs farms to gentlemen.

N° 5, 8, and 3, are nearly alike —— that is, 100 acres, half and half —— 80 acres, 60 graſs and 20 arable —— and 100 acres of clay, all arable; but the very mention of the laſt, in which the gentleman is neceſſarily under ſo many diſadvantages not to be eſtimated, is ſufficient to tell

tell us that ſhould be rejected: the 60 graſs and 20 arable I ſhould prefer, having ſo much leſs labour, and fewer chances againſt it

N° 7. and 2. that is, 80 acres all light arable, and 60 laid down to graſs, are likewiſe upon a par: there can therefore be no compariſon between them; the latter muſt in every reſpect be preferable.

The 12 acres cultivated in carrots and lucerne, are the leaſt beneficial of any, (under the circumſtances recited in that eſtimate): but this proceeds from ſo large a ſum of money being expended on ſo ſmall a tract of land; thoſe vegetables, in a due proportion to the ſtock, will hereafter be found as beneficial as moſt, and to yield a profit much ſuperior to that of the common farmer. I did not ſtrike out the calculation, that gentlemen might ſee that they are not to reaſon too much by analogy in tillage farms, and to conclude that, becauſe 50 acres are very profitably employed upon a large ſcale, that 50 may be equally ſo on a ſmaller.

It is evident that the joint application of cabbages and lucerne to the feeding of cattle, is a moſt profitable farm to a gentleman, and from the ſimplicity of the buſineſs, being drawn as it were to one point of buying and ſelling, (an object of great importance to a gentleman) is open to few objections, and chances of being cheated and deceived, as any tillage farm can be; for the deduction of 27 *per cent.* on the labour in theſe improved farms, anſwering at leaſt a principal part of the objections relative to that quarter; and the ſimplicity of the buſineſs of them, in compariſon with a corn one, removing many others, leave theſe farms very beneficial ones: Here is no ſeed to buy, and to truſt

through

through ſervants hands—no critical ſeaſons to be caught in ſowing, reaping, harveſting, &c. where a ſmall loſs in labour is attended with great conſequences:—and almoſt all the labour that is required, is in a pretty regular path, and open to few impoſitions. In the buying and ſelling cattle, the gentleman certainly is inferior to the common farmer; but then he is equally ſo in graſs farms, which every one who occupies, whether gentlemen or farmers, find ſo greatly profitable: In one word, I cannot but recommend the cabbage and lucerne farm to a gentleman, preferably to any of the reſt.

The next profitable farm to a gentleman is that which is all graſs: in theſe he *nearly* equals the farmer in thoſe points not reducible to calculation, as well as in ſuch as are to be eſtimated. No gentleman, if he is in heſitation whether to farm or let it alone, need to fear a graſs one; he *cannot* (I might almoſt ſay) loſe by it, but he *may* make very conſiderable profit. I know not by what means or in what fund he will be able to make 17 *per cent.* of his money; and at the ſame time, build only upon *common* foundations, following a profeſſion which is known to be profitable; and depending upon no *novelties*; I think he may be contented, and truſt to agriculture as ſecurely as ſo many do to commerce, for much leſs but more hazardous profits.

I here addreſs myſelf to ſuch men as reject the idea of purſuing any thing out of the common road;——who would much rather farm in the common ſtile for 10 *per cent.* than upon new improvements for 20. Such people, it is true, have but little that is rational in them, but we muſt addreſs even that little:——To thoſe who are ſenſible that the world is not yet arrived at its higheſt

higheſt perfection in huſbandry, and that practices may be *profitable* though *new*, we may venture to uſe a different language, and calculate lucerne and cabbages, for inſtance, to yield a more conſiderable profit than wheat or turnips.

But the utility of theſe vegetables, as well as ſome others of the ſame kind, is by no means ideal; though not common in every part of England, yet they have been cultivated, and *in large* too, with great ſucceſs by many.

In the next claſs I made, *viz.* N° 5, 8, and 3, the more graſs we find in a farm, the more profitable it is; a new proof how important it is to gentlemen to prefer that to all common huſbandry: the ſame obſervation is applicable to N° 7, and 2.

In the compariſon between the gentleman and the farmer, the reader will find freſh inſtances of the ſuperiority of graſs to arable, for gentlemen's culture.

CHAP.

CHAP. XXII.

Of the moſt advantageous method of diſpoſing of any ſum from 700*l.* *to* 1000*l.* *in farming.*

I CANNOT enter on any chapter, without previouſly remarking what numbers of variations I am in each obliged to make, that are too inconſiderable for particular explanations: Now, one part of theſe papers ending where the other begins——the laſt chapter, for inſtance, extends to 700*l.* and even higher than that ſum; and the preſent one begins, as it were, with 700*l.* hence the reader may ſay, *why* is a variation made between a man who farms with 700*l.* and another with 750*l.*——This is very true; and I feel the force of the objection; but when ſhould variations be made? Muſt none come into the account but ſuch marking ones as thoſe of 1000*l.* and 100*l.*? Colours may be mixed ſo as to be difficult to pronounce upon; and ſo as the eye, though not deſcription, can ſeparate. It is the ſame with ſuch an aſcending ſeries as I am in at preſent.

N° 1.

One hundred and ſeventy acres, arable; the ſoil clay or loam.

I call this farm *arable*, but 176 acres of it are the arable part; and I ſuppoſe 10 acres of graſs about the houſe, for the utility of convenience: Such variations are too inconſiderable to notice.

Stock.

Stock.

Rent, &c.				*l.*	*s.*	*d.*
170 Acres, at 17 *s.*	£.	144	10 0			
Tythe, at 4 *s.* -		28	18 0			
Rates, &c. 4 *s.* -		28	18 0			
				202	6	0

Live Stock.

6 Horſes, - -		90	0 0			
20 Cows, - -		100	0 0			
3 Sows, - -		3	10 0			
				193	10	0

Implements.

One waggon, -	£.	25	0 0			
2 Carts, -		24	0 0			
3 Ploughs, -		4	14 6			
A pair of harrows,		2	10 0			
Two rollers, -		4	0 0			
Harneſs for 6 horſes,		8	0 0			
20 Sacks, - -		3	0 0			
Sundry ſmall articles,		10	0 0			
Dairy furniture, -		20	0 0			
				101	4	6

Seed and tillage.

Four earths, on 40 acres of wheat land,	£.	32	0 0			
Seed, - -		20	0 0			
Sowing, - -		1	0 0			
Water-furrowing,		2	0 0			
Three earths on 40 acres of ſpring corn land,		24	0 0			
Carry over,	£	79	0 0	497	0	6

Seed,

Brought over,	£. 79	0	0	497	0	6
Seed, - -	20	0	0			
Clover ditto, -	8	0	0			
Sowing, - -	1	0	0			
Water-furrowing,	1	0	0			
Two earths on 40 acres of bean land, -	16	0	0			
Seed, - -	16	0	0			
Sowing, - -	2	0	0			
Water-furrowing; *	1	0	0			
Harrowing 40 acres,	2	0	0			
				146	0	0

Labour.

One earth on 40 acres of wheat land, -	£. 2	0	0			
Harrowing, -	0	10	0			
Sowing, - -	0	10	0			
Water-furrowing,	2	0	0			
Weeding, - -	2	0	0			
Reaping and harvesting, at 6 *s.* -	12	0	0			
Thrashing the crop, 3 quarters *per* acre, 120 at 2 *s.* -	12	0	0			
Carry over,	£. 31	0	0	643	0	6

* The preceding farmer's clover crop stands a second year, which is effected by his sowing the wheat on the fallow instead of the clover, as he perhaps might not sow beans. It is to be remembered that farmers are desirous enough of fallows when they are paid for ploughing.

Carrying

Brought over, £.	31	0	0	643	0	6
Carrying out 10 qrs. at a time, 2 men 1 day,	1	4	0			
Three earths on 40 acres of ſpring corn land,	6	0	0			
Harrowing, -	0	10	0			
Sowing, - -	0	10	0			
Water-furrowing,	1	10	0			
Mowing and harveſting, at 4*s.* - -	8	0	0			
Thraſhing 4 qrs. *per* acre, 160 quarters, at 1 *s.*	8	0	0			
Carrying out 30 acres of barley, 4 qrs. *per* acre, 120 qrs. 12 qrs. at a time, 2 men 1 day,	1	0	0			
Three earths on 40 acres of bean land, -	6	0	0			
Sowing, - -	2	0	0			
Water furrowing,	1	0	0			
Hand-hoeing once, at 6*s.*	12	0	0			
Horſe-hoeing 3 times, at 6*d.* - -	3	0	0			
Reaping and harveſting, at 7*s.* - -	14	0	0			
Thraſhing 3 qrs. *per* acre, 120 quarters, at 1 *s.*	6	0	0			
Carrying out 9 qrs. at a time, 2 men 1 day,	1	8	0			
Chopping and raking 40 acres of wheat ſtubble,	3	0	0			
Carting ditto home, 8 days, 5 men, -	2	0	0			
Ditching 200 perches, at 1 *s.* - -	10	0	0			
Carry over, £.	118	2	0	643	0	6

Carting

Brought over, £.	118	2	0	643	0	6
Carting the earth, 600 loads into the farm yard, 20 load a day, and 3*d.* a load filling, and 1*s.* 3*d.* a day driving, 10 days, 6*s.* 3*d.* -	3	2	6			
26 Head of cattle, at 12 load, 312 loads mixing with 600 of earth, 912, at 1*d.* - -	3	16	0			
Carting 912 loads on to the land, 20 a day, 45 days, 3*s.* a ſcore, or day, filling and ſpreading, and 1*s.* 3*d.* driving, 4*s.* 3*d.*	9	11	3			
Mowing and making 10 acres of graſs into hay, at 5*s.* -	2	10	0			
Carting ditto home, and ſtacking 3 days of 7 men, at 1*s.* 4*d.*	1	8	0			
Cutting 5 buſhels of chaff *per* week, 2 months, 400 buſhels, at ½*d.*	0	16	8			
Carting faggots, -	0	5	0			
The preceding work I calculate to employ the team 245 days; we may therefore ſuppoſe 40 days employed in bringing manure from the neareſt town, 2 men a day, -	4	0	0			
Carry over, £.	143	11	5	643	0	6

N. B. This

Brought over,	£.	143	11	5	643	0 6
N. B. This is work which does not require fine weather, but may be done when tillage cannot go on. Otherwiſe 285 days, out of 313, would be too large an allowance, as a few trifling jobs are not taken into the account.						
Sundry ſmall articles of work, to the amount of a boy at 6 *d.* a day,		9	0	0		
	£.	152	11	5		
Suppoſe the farmer earns,		12	0	0		
					140	11 5

Sundry articles.

Shoeing, - -	£.	3	12	0		
Wear and tear, -		20	0	0		
Market expences, -		3	0	0		
40 Loads of manure,		10	0	0		
Caſh in hand to anſwer incidental expences,		50	0	0		
					86	12 0
					£. 870	3 11

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	202	6	0
Seed for 40 acres of wheat, 40 of ſpring-corn, 40 of clover, and 40 of beans, - - -	64	0	0
Labour, - - - -	140	1	5
Sundry articles, - -	36	12	0
£.	442	19	5

Produce.	*l.*	*s.*	*d.*
120 Quarters of wheat, -	240	0	0
120 Quarters of barley, at 16*s.*	96	0	0
120 Quarters of beans, at 32*s.*	192	0	0
20 Cows, - -	100	0	0
	628	0	0
Expences, - - - -	442	19	5
	185	0	7
Intereſt, - - -	43	5	0
Profit, - - - £.	141	15	7

The profit of this farm is 21 *l.* 7*s. per cent.* which is certainly conſiderable: The buſineſs, though large, is yet ſimple, and conducted upon an advantageous plan. Theſe proportions of 40 acres of wheat, 40 of ſpring-corn, 40 of clover, and 40 of beans in drills, are very beneficial, with the aſſiſtance of 10 acres of graſs. The wheat and beans yield plenty of ſtraw for litter, and alſo of ſtubble for ſpreading in the farm-yard

yard to convert into dung, at the ſame time that it keeps the cows dry, and warm lodged all winter: the barley and oats afford ſtraw for feeding the cows in winter, and the graſs, hay both for them and the horſes. The clover and the after-feed of the graſs are an ample proviſion for the cows and horſes in ſummer: In a word, all parts of a farm of this ſize afford to each other a mutual aſſiſtance.——I ſhould remark that I make cows the ſtock, and not ſheep, upon account of having a winter ſtock for the ſtraw: Allotting 20 cows to be principally fed upon clover, will alarm many farmers not uſed to ſuch huſbandry; all I can ſay to them is, that I know many farms whereon dairies of cows are kept, that have not a ſingle acre of graſs; but the 10 acres in the farm in queſtion is a full anſwer to ſuch objections, as the farmers, in ſuch countries as admit but a partial uſe of clover, allow it to be an excellent food for cows, if they are lodged every night in a natural graſs field. However the objection, even if it had weight in general, would have none here, as the great point is the product of the clover, which will not yield leſs than I have ſtated, be it managed as it may: and, in breeding countries, there is no neceſſity of applying it to the dairy *.

The gentleman's account of this farm will be as follows:

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* The reader doubtleſs remarks that I have left out houſe-keeping in this account: It is now time to drop that article, for reaſons too numerous to inſert: It is too various now to calculate.

Stock.				*l.*	*s.*	*d.*
Rent, &c.				202	6	0
Live ſtock, as before,				193	10	0
Implements,				101	4	6
Seed and tillage,				146	0	0
Labour,	£. 152	1	5			
27 *per cent.*	41	0	0			
				193	1	5
Sundry articles,				86	12	0
			£.	922	13	11

ANNUAL ACCOUNT.

Expences.				*l.*	*s.*	*d.*
Rent, &c.				202	6	0
Seed,				64	0	0
Labour,				193	1	5
Sundry articles,				36	12	0
			£.	495	19	5

Produce.				*l.*	*s.*	*d.*
The ſame,				628	0	0
Expences,				495	19	5
				132	0	7
Intereſt,				45	18	0
Profit,			£.	86	2	7

The

The gentleman receives 14*l.* 7*s. per cent.* for his money in this farm, which is as much as he has reaſon to expect from any arable one, managed in the common form: but let it always be remembered that his diſadvantages in theſe are numerous, beſides that of labour deducted in his account. If all of them were reducible to eſtimate, the remaining profit would be found of wondrous lightneſs: The ſingle article of labour gives the farmer, in the account of this farm, 7*l. per cent.* ſuperiority, which is a vaſt difference.

N° 2.

Variation the firſt.

One hundred and ten acres arable; the ſoil light enough for turnips.

The ten acres of this farm I ſuppoſe to be graſs.

Stock.

Rent, &c.

Rent of 100 acres, at 18*s.* -	£.	99	0	0	
Tythe, at 4*s.* -		19	6	0	
Rates, &c. at 4*s.* -		19	6	0	
					137 12 0

Live ſtock.

Four horſes, -	£.	60	0	0	
20 Cows, -		100	0	0	
2 Sows, - -		2	0	0	
50 Heifers or ſteers,		250	0	0	
					412 0 0
Carry over,	£.				549 12 0

Brought over, £. 549 12 0

Implements.

A waggon, -	£. 25	0	0
Two carts, -	20	0	0
Two ploughs, -	3	3	0
Harneſs, - -	8	0	0
Harrows and rollers,	4	0	0
Sacks, - -	3	0	0
Dairy furniture, -	12	0	0
Sundry ſmall articles,	10	0	0
		85	3 0

Seed and tillage.

Four earths on 25 acres of wheat land,	£. 20	0	0
Seed, - -	12	10	0
Sowing, - -	0	12	6
Water-furrowing, -	0	12	6
Two earths on 25 acres of ſpring corn land,	10	0	0
Seed, - -	12	10	0
Sowing, - -	0	6	3
Seed clover, -	5	0	0
Sowing, - -	0	6	3
Harrowing, -	1	5	0
Rolling, - -	0	5	0
Water-furrowing, -	0	6	3
One earth on 25 acres of fallow, -	5	0	0
Seed 25 acres of turnips,	0	12	6
		69	6 3

Labour.

One earth on 25 acres of wheat land, -	£. 1	5	0
Carry over,	£. 1	5	0 704 1 3

Sowing,

Brought over,	£. 1	5	0	704	1	3
Sowing, - -	0	6	3			
Harrowing, -	0	6	3			
Water-furrowing, -	0	6	3			
Weeding, -	1	5	0			
Reaping and harvefting, at 6 *s.* - -	7	10	0			
Thraſhing the crop, 3 qrs. *per* acre, 75 qrs. at 2 *s.*	7	10	0			
Carrying out 10 qrs. at a time, call it 8 journeys,	0	16	0			
Three earths on 25 acres of ſpring-corn land,	3	15	0			
Sowing, - -	0	6	3			
Harrowing, - -	0	6	3			
Water-furrowing, -	0	6	3			
Rolling, - -	0	1	0			
Sowing clover, -	0	6	3			
Mowing and harvefting at 4 *s.* - -	5	0	0			
Thraſhing the crop, 4 qrs. *per* acre, 100 qrs. at 1 *s.*	5	0	0			
Carrying out 18 acres of barley, 72 qrs. 12 at a time, 6 journeys,	0	12	0			
Five earths on 25 acres of turnip land, -	6	5	0			
Sowing, - -	0	6	3			
Harrowing, - -	0	6	3			
Hand-hoeing, at 7 *s.*	8	15	0			
Drawing the turnips and carting them home, at 7 *s.* 6 *d.* -	9	7	6			
Mowing, making, carting, and ſtacking 10 acres of graſs, -	3	18	0			
Carry over,	£. 63	15	9	704	1	3

Brought over,	£.	63	15	9	704	1 3
Cutting 300 buſhels of chaff, - -		0	12	6		
Chopping. &c. &c. 25 acres of ſtubble,		1	17	6		
Carting home, -		1	10	0		
Carting faggots, -		0	4	0		
Ditching 130 perches,		6	10	0		
Carting the earth, 390 loads to farm-yard, 20 a day, 3 *d.* a load and 1 *s.* 3 *d.* driving, ſay 20 days, 6 *s.* 3 *d.* - -		6	5	0		
68 Head of cattle at 12 loads, 816 loads, 1206 in all: mixing at 1 *d.*		5	0	6		
Carting 1206 loads, and ſpreading, 3 *s.* a ſcore, 1 *s.* 3 *d.* driving, 4 *s.* 3 *d.* 60 days, -		12	15	0		
Sundry ſmall articles,		9	0	0		
	£.	107	10	3		
Farmer earns, -		12	0	0		
					95	10 3

Sundry articles.

Shoeing, and wear and tear, - -	£.	15	0	0	
Market expences, -		3	0	0	
30 Loads of ſtraw,		20	0	0	
Caſh in hand, -		50	0	0	
					88 0 0
				£.	887 11 6

ANNUAL

ANNUAL ACCOUNT.

Expences.				*l.*	*s.*	*d.*
Rent, &c. - - -				137	12	0
50 Heifers, - -				250	0	0
Seed, - - - -				30	12	6
Labour before, -	£. 95	10	3			
Add for thraſhing, and carrying out 6 buſhels *per* acre more wheat, and 1 quarter more barley, -	3	9	0			
				98	19	3
Sundries, - - -				38	0	0
			£.	555	3	9

Produce.			
25 Acres of wheat, 94 qrs. -	169	0	0
18 Acres of barley, 90 qrs. -	72	0	0
20 Cows, - - -	100	0	0
50 Fat beaſts, - - -	350	0	0
£.	691	0	0
Expences, - -	555	3	9
	135	16	3
Intereſt, - - -	44	7	0
Profit, - - - £.	91	9	3

The capital pays 15 *l.* 6 *s. per cent.*

Upon this account I ſhould remark, that the reader ſhould not be ſurpriſed at this variation in the value of the crops, as the ſuperior quantity of

of manure makes it neceſſary to raiſe the products. Half this farm is every year manured at the rate of 24 loads *per* acre. The gentleman's account is as follows:

Stock.				*l.*	*s.*	*d.*
Rent, &c.				137	12	0
Live ſtock,				412	0	0
Implements,				85	3	0
Seed and tillage,				69	6	3
Labour,	£. 107	10	3			
27 *per cent.*	28	17	0			
				136	7	3
Sundry articles,				88	0	0
			£.	928	8	6

ANNUAL ACCOUNT.

Expences.				*l.*	*s.*	*d.*
Rent, &c.				137	12	0
50 Heifers,				250	0	0
Seed,				30	12	6
Labour,	£. 110	19	3			
27 *per cent.*	29	19	0			
				140	18	3
Sundries,				38	0	0
			£.	597	2	9

Produce.				*l.*	*s.*	*d.*
The ſame,				691	0	0
Expences,				597	2	9
				93	17	3
Intereſt,				46	8	0
Profit,			£.	47	9	3

The capital pays 10 *l.* 2 *s. per cent.*

N° 3.

N° 3.

Variation the ſecond.

One hundred and 20 acres, all graſs.

Stock.

Rent, &c.				*l.*	*s.*	*d.*
Rent of 120 acres,	£. 120	0	0			
Tythe, at 4*s.* -	24	0	0			
Rates, &c. at 4*s.*	24	0	0			
				168	0	0

Implements.

One ſmall three wheeled cart, -	£. 7	0	0			
Sundries including harneſs,	6	0	0			
				13	0	0
				£. 181	0	0

Live ſtock.

1 Horſe, -	£. 15	0	0			
120 Steers, at 5*l.*	600	0	0			
				615	0	0

Labour.

100 perch of ditching, and carting it on to the land, at 3*s.* -	£. 15	0	0			
Carry over,	£. 15	0	0	796	0	0

Sundry

Brought over,	£. 15	0	0	796	0	0
Sundry ſmall articles,	4	0	0			
	£. 19	0	0			
Suppoſe the farmer earns as before, -	12	0	0			
				7	0	0

Sundry articles.

Shoeing, and wear and tear, -	£. 1	5	0			
Market expences,	1	0	0			
Caſh in hand, -	30	0	0			
				32	5	0
				£. 835	5	0

ANNUAL ACCOUNT.

Expences.

Rent, &c. -	£. 168	0	0			
120 Steers, -	600	0	0			
Labour, - -	7	0	0			
Sundries, - -	2	5	0			
				777	5	0

Produce.

120 Fat ſteers, at 8 *l.* -				960	0	0
Expences, - -				777	5	0
				£. 182	15	0
Intereſt, - - -				41	15	0
Profit, - - -				£. 141	0	0

The

The capital pays 20*l.* 14*s.* *per cent.* which is a new proof of the great benefits reſulting from graſs farms. The gentleman's account of this is as follows:

Stock.				*l.*	*s.*	*d.*
Rent, &c.	-	-		168	0	0
Implements,	-	-		13	0	0
Live ſtock,	-	-		615	0	0
Labour,	-	£. 19	0 0			
27 *per cent.*	-	5	2 0			
				24	2	0
Sundries,	-	-	-	32	5	0
			£.	852	7	0

ANNUAL ACCOUNT.

Expences.				*l.*	*s.*	*d.*
Rent, &c.	-	-		168	0	0
120 Steers,	-	-		600	0	0
Labour,	-	-	-	24	2	0
Sundries,	-	-	-	2	5	0
			£.	794	7	0

Produce.				*l.*	*s.*	*d.*
The ſame,	-	-	-	960	0	0
Expences,	-	-		794	7	0
			£.	165	13	0
Intereſt,	-	-	-	42	12	0
Profit,	-	-	£.	123	1	0

The capital pays 19*l.* 9*s.* *per cent.*

N° 3.

N° 3.

Variation the third.

One hundred and ten acres arable, the ſoil clay or loam, and laid down to graſs.

This, like the preceding farms, is called an arable one, but I ſhould remark that ten acres are ſuppoſed to be old graſs. I ſuppoſe all the arable unſown by the preceding tenant; and, for the ſake of variations in the calculation, ſhall throw the whole expence into one view.

Stock.

Rent, &c.

Of 110 acres, at 17 *s.*	£.	93	10	0	
Tythe, at 4 *s.* -		18	14	0	
Rates, &c. at 4 *s.*		18	14	0	
					130 18 0

Live ſtock.

4 Horſes, - - -	£.	60	0	0	

Implements.

2 Carts, -	£.	24	0	0	
2 Ploughs, - -		3	3	0	
Harneſs, - -		6	0	0	
Harrows and Rollers,		3	10	0	
Sundry ſmall articles,		5	0	0	
					41 13 0
Carry over,	£.	232	11	0	

Seed

Brought over, £. 232 11 0

Seed and tillage.

Four earths on 25 acres of ſpring-corn land,	£. 20	0	0
Seed, - -	12	10	0
Sowing, -	0	6	3
Water-furrowing,	1	5	0
Harrowing, -	1	5	0
Rolling, - -	0	3	0
Graſs ſeed for 25 acres,	25	0	0
Sowing, - -	1	5	0
			61 14 3

Labour.

Six earths on 75 acres of fallow, -	£. 22	10	0
Mowing and harveſting 25 acres of ſpring corn, at 4*s.* -	5	0	0
Thraſhing the crop, 4 qrs. *per* acre, 100 qrs. at 1*s.*	5	0	0
Carrying out 18 acres of barley, 72 qrs. 12 at a time, 6 journeys,	0	12	0
Mowing, making, carting, and ſtacking, 5 acres of hay, - -	2	0	0
Sundry ſmall articles,	3	10	0
	£. 38	12	0
Farmer earns, -	12	0	0
			26 12 0
Carry over,			£. 320 17 3

Sundry

				Brought over,	£. 320	17 3
		Sundry articles.				
Shoeing, and wear and tear,	- -	£. 3	10 0			
Caſh in hand,	-	30	0 0			
				33	10 0	
Firſt year's expences,	-			£. 354	7 3	
		Second year.			*l.*	*s.* *d.*
Rent, &c.	- -	-			130	18 0
Seed for 75 acres,	£.	37	10 0			
Graſs ſeeds ditto,	-	75	0 0			
5 Cows, and dairy furniture,	- -	28	0 0			
				140	10 0	
		Labour.				
Mowing, making, and ſtacking 25 acres of new graſs,	-	£. 11	0 0			
Three earths on 75 acres,		11	5 0			
Sowing,	- -	0	18 9			
Harrowing,	-	0	18 9			
Rolling,	- -	0	6 0			
Sowing graſs ſeeds,		3	15 0			
Water-furrowing,	-	3	15 0			
Mowing and harveſting, at 4 *s*,	- -	15	0 0			
Thraſhing, 4 qrs. *per* acre, 300 qrs. at 1 *s*.		15	0 0			
Carry over,	£.	61	18 6	271	8 0	

Carrying

Brought over, £.	61	18	6	291	8	0
Carrying out 67 acres of barley, 268 qrs. 12 at a time, 23 journeys,	2	6	0			
Sundry ſmall articles,	3	10	0			
	67	14	6			
Farmer earns, -	12	0	0			
				55	14	6
Sundry articles, - -				3	10	0
Second year's expences, -			£.	330	12	6

Third year.	*l.*	*s.*	*d.*
Rent, &c. - - -	130	18	0
18 Home-bred heifers, -	72	0	0

Labour.

Mowing, making, and ſtacking 75 acres of new graſs, -	£.	31	17	0		
Sundry ſmall articles,		3	10	0		
		35	7	0		
Farmer earns, -		12	0	0		
					23	7	0
Sundry articles, - -					3	10	0
Third year's expences, -				£.	229	15	0

Fourth year.	*l.*	*s.*	*d.*
Rent, &c. - -	130	18	0
110 Steers, - -	550	0	0
Carry over, £.	680	18	0

Brought over,				£. 680	18 0

Labour.

Mowing, making, and ſtacking, 1 acre hay,	0	7	0		
80 Perch of ditching and carting earth on to land, at 3*s.* - -	12	0	0		
Sundry ſmall articles,	3	10	0		
	15	17	0		
Farmer earns, -	12	0	0		
				3	17 0

Sundry articles.

Shoeing, and wear and tear, - -	1	5	0			
A ſmall three wheeled cart,	7	0	0			
Sundries, - -	2	0	0			
				10	5	0
				£. 695	0	0

Produce.

Firſt year.

72 Quarters of barley, at 16*s.*	£. 57	12	0

Second year.	*l.*	*s.*	*d.*
268 Quarters of barley, -	214	8	0
5 Cows, - - -	25	0	0
25 Tons of hay, - -	50	0	0
	£. 289	8	0

Third

Third year.	*l.*	*s.*	*d.*
5 Cows ſold, - -	25	0	0
75 Tons of hay, - -	150	0	0
18 Fat heifers, - -	108	0	0
Sale of 3 horſes, implements of tillage, &c. they coſt 80*l.* -	35	0	0
£.	318	0	0

GENERAL ACCOUNT.

Expence of firſt year, - £.	354	7	3
Intereſt, - - -	17	14	0
Expence of ſecond year, -	331	12	6
Intereſt, - - -	34	5	0
Expence of third year, -	229	15	0
Intereſt, - - -	45	14	0
Expence of fourth year, -	697	0	0
£.	1710	7	9

Produce of the firſt year, -	57	12	0
——— of the ſecond, -	289	8	0
——— of the third, -	318	0	0
£.	665	0	0

Total expence, - -	1710	7	9
—— Produce, - -	665	0	0
Total neceſſary to ſtock this farm, - £.	1045	7	9

ANNUAL ACCOUNT.

Expences.

Thoſe of the fourth year except the cart, - -	£. 690	0 0

Produce.	*l.*	*s.*	*d.*
110 Steers, - -	880	0	0
Expences, - - -	690	0	0
	£. 190	0	0
Intereſt, - - -	52	15	0
Profit, - - -	£. 137	5	0

The capital pays 18*l.* 1*s. per cent.* which is conſiderable. The gentleman's account of this farm is as follows:

Stock.			*l.*	*s.*	*d.*
Rent, &c. - - -			130	18	0
Live ſtock, - -			60	0	0
Implements, - -			41	13	0
Seed and tillage, - -			61	14	3
Labour, -	£. 38	12	0		
27 *per cent.* -	10	10	0		
			49	2	0
Sundries, - - -			33	10	0
		£.	376	17	3

Second

Second year.				*l.*	*s.*	*d.*
Rent, &c. - - -				130	18	0
Seed, - - -				112	10	0
5 Cows, &c. - -				28	0	0
Labour, -	£.	68	14 6			
27 *per cent.* -		18	12 0			
				87	6	6
Sundry articles, - -				3	10	0
			£.	362	4	6

Third year.				*l.*	*s.*	*d.*
Rent, &c. - -				130	18	0
Heifers, - - -				72	0	0
Labour, -	£.	35	7 0			
27 *per cent.* -		9	9 0			
				44	16	0
Sundry articles, - -				3	10	0
			£.	251	4	0

Fourth year.				*l.*	*s.*	*d.*
Rent, &c. - - -				130	18	0
Steers, - - -				550	0	0
Labour, -	£.	15	17 0			
27 *per cent.* -		4	6 0			
				20	3	0
Sundry articles, - -				10	5	0
			£.	711	6	0

The produce the ſame as before.

GENERAL ACCOUNT.

Expence of firſt year, -	£. 376	17	3
Intereſt, - -	18	17	0
Expences of ſecond year, -	362	4	6
Intereſt, - -	36	9	0
Expences of third year, -	251	4	0
Intereſt, - -	49	10	0
Expence of the fourth year, -	711	6	0
	£. 1806	17	9
Total produce, - -	665	0	0
Total neceſſary to ſtock, -	£. 1141	17	9

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Thoſe of the fourth year, the cart excepted, - -	704	6	0
Produce.	*l.*	*s.*	*d.*
The ſame, - -	880	0	0
Expences, - - -	704	6	0
	175	14	0
Intereſt, - - - -	57	2	0
Profit, - - - £.	118	12	0

The capital pays 15 *l.* 9 *s. per cent.*

N°

N° 5.

Variation the fourth.

Fifty-three acres all arable; the ſoil all light, or part light and part ſtiff.

This farm I ſuppoſe to be either all a light ſoil, or part light and part heavy: the firſt to be cropped with carrots, and the ſecond with lucerne, for the joint fatting of cattle; but I muſt remark that theſe are both vegetables which will thrive on various ſoils, carrots on loams only that are more inclinable to lightneſs than to heavineſs, and lucerne upon light loams as well as clays. But variations of ſoil are ſo great upon ſmall tracts, even in ſingle farms, that it is no wild or improbable ſuppoſition to ſtate the lucerne part of the farm dry and ſound, but ſtiff loam; and the carrot part dry and light loam.

Any dry ſoil, from abſolute ſand to a ſtiffiſh loam, will do for carrots: — but no clays: I have cultivated them with great ſucceſs on a good wheat loam.

Stock.

Rent, &c.				*l.*	*s.*	*d.*
Rent of 53 acres, at 1 *l.* 1 *s.* - -	£.	55	13 0			
Tythe, at 4 *s.* -		11	0 0			
Rates, &c. &c. at 4 *s.*		11	0 0			
				77	13	0
Carry over,	£.			77	13	0

Brought over, £. 77 13 0

Live Stock.

4 Horſes, - -	60	0	0
45 Steers, &c. at 5 *l.*	225	0	0
		285	0 0

Implements.

One waggon, -	£. 25	0	0
Two ſmall three wheeled carts, -	13	0	0
One plough, -	2	2	0
Harrows, -	2	10	0
Harneſs, - -	6	0	0
Sundry ſmall articles,	2	0	0
		50	12 0

Seed and tillage.

Four ploughings, 10 acres of land for wheat, but not ſown, -	8	0	0
Water-furrowing,	0	5	0
2 Ploughs on 5 acres oat land, but not ſown,	2	0	0
Carrot ſeed for 15 acres, at 6 *s.* -	4	10	0
		14	15 0

Labour.

Ploughing 38 acres fallow, ſix times, -	£. 11	8	0
Thrice harrowed, -	0	9	6
Ploughing 15 acres for carrots once with 4			
Carry over,	£. 11	17	6 428 0 0

horſes,

Brought over,	£.	11	17	6	428	0 0
horſes, and 3 men twice in a furrow, ½ acre *per* day, 30 days, -		4	10	0		
Hoeing, at 3 *l.* *per* acre,		45	0	0		
Digging up, at 1 *l.*		15	0	0		
Carting home, at 5 *s.*		3	15	0		
Ditching 50 perches, at 1 *s.*		2	10	0		
Carting 3 loads of earth *per* perch, or 150 loads; 25 loads a day, 2 *d.* a load filling, and 1 *s.* 3 *d.* a day driving, -		1	12	6		
Mixing theſe 150 loads with 200 of dung in yard, 350 at 1 *d.*		1	10	0		
Filling, ſpreading, and driving away, -		4	0	0		
Carting home faggots,		0	1	0		
150 Days employed in bringing manure from the neareſt market town, 1 load a day, 2 men,		15	0	0		
		104	16	0		
27 *per cent.* -		27	10	0		
					132	6 0

Sundry articles.

30 Loads of ſtraw,	£.	20	0	0		
Shoeing, - -		2	8	0		
Wear and tear, -		6	10	0		
150 Loads of manure,		37	10	0		
Caſh in hand to anſwer incidental expences,		30	0	0		
Carry over,	£.	96	8	0	560	6 0

Keeping

Brought over,	£.	96	8	0	560	6 0
Keeping 4 horſes a year, calculated at -		40	0	0		
					136	8 0
Total,	£.				696	14 0

Produce the firſt year.

45 Steers, at 8 *s.* 8 *d.* -	£.				378	0 0

The account of the ſecond year will be as follows:

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	77	13	0
75 Heifers or ſteers, -	375	0	0
Seed for 38 acres of lucerne, -	11	8	0
Ditto for 15 acres of carrots, -	4	10	0
£.	468	11	0

Labour.

Two ploughings 38 acres of fallow for lucerne,		3	16	0		
Three harrowings, -		0	9	6		
Drilling: Coſt of a drill plough,	8 0 0					
Re-ſold for	4 0 0					
		4	0	0		
Labour in ditto, at 6 *d.*		0	19	0		
Four hand-hoeings, at 6 *s.*		45	12	0		
Cutting 3 times, at 1 *s.* 6 *d.*		8	11	0		
Raking together, loading and carting home, at 1 *s.* 6 *d.* -		8	11	0		
Ploughing 15 acres for carrots, once with four						
Carry over, £.		71	18	6	468	11 0

horſes

Brought over,	£.	71	18	6	468	11 0
horſes and three men, twice in the ſame furrow, at the rate of half an acre a day, 30 days,		4	10	0		
Hoeing, at 3 *l. per* acre,		45	0	0		
Digging up, 1 *l.* -		15	0	0		
Carting home, at 5 *s.*		3	15	0		
Ditching 50 perches,		2	10	0		
Carting 150 loads of the earth into farm-yard,		1	12	6		
Mixing theſe 150 loads of earth with 500 loads of dung, 650, at 1 *d.*		2	14	0		
Filling, ſpreading, and driving away, -		7	0	0		
Carting home faggots,		0	2	0		
Cutting 6 months chaff for the horſes, -		2	0	0		
150 Loads manure, brought as before, -		15	0	0		
Sundry ſmall articles of work, including the attendance on the cattle,		10	0	0		
		181	2	0		
27 *per cent.* -		48	17	0		
					229	19 0

Sundry articles.

As before, -	£.	66	8	0		
5 Tons of hay, -		10	0	0		
					76	8 0
					£. 774	18 0

Produce

Produce of the ſecond year.

75 Heifers, &c. - -	£.	900	0 0

I write this calculation for the uſe of *the few* who can form ideas of what the united powers of tillage and manuring can perform; but there is ſo much more done for this ſmall tract of land than ever yet was known, that I do not venture it to the reader in the ſame manner as many other of theſe calculations; but let me remark that I am myſelf confident, from the reſult of experiments on a ſmaller ſcale, that there is nothing here ſuppoſed but what might, and eaſily too, be reduced to practice.

GENERAL ACCOUNT.

		l.	*s.*	*d.*
Expence of the firſt year, -		696	14	0
Intereſt, - - -		34	16	0
Expence of the ſecond, -		774	18	0
	£.	1506	8	0
Produce of the firſt, -		378	0	0
	£.	1128	8	0

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	77	13	0
114 Heifers or ſteers, -	456	0	0
30 Beaſts, - - -	120	0	0
Seed for 15 acres of carrots, -	4	10	0
Carry over, £.	658	3	0

Labour.

Brought over, £. 658 3 0

Labour.

Labour on 15 acres of carrots as before,	£. 68	5	0
Horſe-hoeing 38 acres of lucerne four times, 6*d.*	3	16	0
Two hand-hoeings, at 10*s.*	19	0	0
Cutting four times, at 1*s.* 6*d.*	11	8	0
Raking, loading, and carting, 1*s.* 6*d.*	11	8	0
Ditching and carting, &c. as before,	13	18	6
Cutting chaff,	0	12	6
150 Loads manure,	15	0	0
Sundry ſmall articles as before,	10	0	0
	£. 153	8	0
27 *per cent.*	41	6	0
			194 14 0

Sundry articles.

Straw,	£. 20	0	0
Shoeing, and wear and tear,	7	10	0
Manure,	37	10	0
			65 0 0
			£. 917 17 0

Produce

Produce.

114 Fat heifers, -	£. 798	0	0
30 Beaſts, - -	240	0	0
	1038	0	0
Expences, - - - - -	917	17	0
	120	3	0
Intereſt, - - -	56	8	0
Profit, - -	£. 63	15	0

The capital pays 10 *l.* 12 *s. per cent:* but that profit is by no means equal to the ſpirited manner in which this little farm is cultivated; from whence we may venture to conclude, that the proportions here ſketched are not ſo advantageous as the culture will admit: this will be clearly ſeen from further enquiries.

N° 6.

Variation the fifth.

One hundred and ten acres arable; the ſoil clay, cultivated on improved principles; cabbages in a courſe.

The ten acres I ſuppoſe to be graſs near the houſe.

Stock.

Rent, &c.

Rent of 110 acres, at 18 *s.* - -	£. 99	0	0		
Tythe, at 4 *s.* -	19	16	0		
Rates, &c. at 4 *s.*	19	16	0		
				138	12	0
Carry over, £.				138	12	0

Live

Brought over, £. 138 12 0

Live ſtock.

4 Horſes, -	£. 60	0	0
20 Cows, -	100	0	0
2 Sows, - -	2	0	0
70 Beaſts, -	350	0	0
			512 0 0

Implements.

A waggon, -	£. 25	0	0
Two carts, -	20	0	0
Two ploughs, -	3	3	0
Harrows and rollers,	3	10	0
Harneſs, - -	8	0	0
Sacks, - -	3	0	0
Sundries, - -	3	0	0
Dairy furniture, -	5	0	0
			72 13 0

Seed and tillage.

Four earths on 25 acres of wheat land,	£. 20	0	0
Seed, - -	12	10	0
Sowing, - -	0	12	6
Water-furrowing, -	1	5	0
Two earths on 25 acres of ſpring corn land,	10	0	0
Seed, - -	12	10	0
Sowing, - -	0	6	3
Water-furrowing, -	0	12	6
Seed clover, -	5	0	0
Sowing, - -	0	6	3
Carry over,	£. 63	2	6 723 5 0

Harrowing,

Brought over,	£.	63	2	6	723	5 0
Harrowing, -		1	5	0		
One earth on 25 acres of fallow, -		5	0	0		
Water-furrowing, -		1	5	0		
Seed for 25 acres of cabbages, -		4	0	0		
					74	12 6
	£.				797	17 6

Labour.

One earth on 25 acres of wheat, - -	£.	1	5	0		
Sowing, - -		0	6	3		
Harrowing, -		0	5	0		
Water-furrowing, -		1	5	0		
Weeding, - -		1	5	0		
Reaping and harvesting,		5	0	0		
Thrashing the crop 3 qrs. *per* acre, 75 qrs. at 2 *s.*		7	10	0		
Carrying out, 8 journeys,		0	16	0		
Three earths on 25 acres of spring corn, -		3	15	0		
Sowing, - -		0	6	3		
Harrowing, -		0	6	3		
Sowing clover, -		0	6	3		
Water furrowing, -		1	5	0		
Mowing and harvesting, at 4 *s*, - -		5	0	0		
Thrashing the crop, 4 qrs. *per* acre, 100 qrs. at 1 *s.*		5	0	0		
Carrying out 16 acres of barley, 64 qrs. at a time, 5 journeys,		0	10	0		
Carry over,	£.	34	1	0	797	17 6

Four

Brought over,	£.	34	1	0	797	17 6
Four earths on 25 acres of cabbage land, -		5	0	0		
Digging the ſeed bed and ſowing, -		0	7	0		
Planting, at 5*s.* -		6	5	0		
Four horſe-hoeings, at 6*s.*		2	10	0		
Two hand-hoeings, at 8*s.*		10	0	0		
Cutting and carting, at 5*s.*		6	5	0		
Mowing, making, carting, and ſtacking 10 acres of graſs, -		4	0	0		
Chopping, raking, and carting 25 acres of ſtubble,		3	15	0		
Ditching 150 perch,		7	10	0		
Carting 450 loads, at 3*d.* filling, and 1*s.* 3*d.* carting, 6*s.* 3*d.* a day for 23 days, -		7	3	0		
94 Head of cattle, 1128 load mixing with 450, in all 1578, at 1*d.*		6	11	6		
Carting 1578 loads, and ſpreading, 78 days, at 4*s.* 3*d.* -		16	11	6		
Carting faggots, -		0	4	0		
Cutting chaff, -		0	12	6		
Sundry ſmall articles,		6	0	0		
		116	15	6		
27 *per cent.* - -		31	11	0		
					148	6 6
Carry over,	£.				946	4 0

Brought over;				£.	946	4 0
Sundry articles.						
Shoeing, and wear and tear,	-	-	£. 15 0 0			
40 Loads of ſtraw,			30 0 0			
Caſh in hand,	-		40 0 0			
					85	0 0
				£.	1031	4 0

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	138	12	0
70 Beaſts, - -	350	0	0
Seed for 25 acres of wheat, 25 of ſpring-corn, 25 of clover, and 25 of cabbages, - -	34	0	0
Labour, - - -	148	6	6
Sundry articles, - - -	45	0	0
£.	715	18	6

Produce.	*l.*	*s.*	*d.*
25 Acres of wheat, 87½ qrs. at 40 *s.*	175	0	0
16 Of barley, 72 at 16 *s.* -	57	12	0
20 Cows, - - -	100	0	0
70 Fat beaſts, at 7 *l.* 15 *s.* -	542	10	0
£.	875	2	0
Expences, - -	715	18	6
	159	3	6
Intereſt, - - -	51	11	0
Profit, - - - £.	107	12	6

Capital

Capital pays 15 *l.* 8 *s. per cent.* which is a very conſiderable profit to a gentleman in whoſe account 27 *per cent.* is charged upon all labour, and proves ſtrongly the great advantages of this culture.——The change from eſtabliſhed modes, is not very great, being only in one crop out of four; but yet it is a change, and for that reaſon we muſt not ſuppoſe a common farmer to have any thing to do with it. This is the advantage of the gentleman; he, from the enlargement of his views, may be ſuppoſed to know very ſoon the ſucceſs that any where attends a new practice, and from the account, may judge of the probability of its being beneficial upon his land: Whatever ſucceſs attends him, the neighbouring farmers will copy him ſo very ſlowly, that father, ſon and grandſon, muſt ſucceed on the ſame land before their neighbours will come into the ſcheme. It was ſo with clover, turnips, and, I doubt not, was once ſo with wheat, and will be ſo with cabbages.—They will however make their way in time.

N° 7.

Variation the ſixth.

One hundred and ten acres arable; the ſoil light, cultivated upon improved principles; carrots in a courſe.

The ten acres I ſuppoſe, as in the laſt farm, to be graſs near the houſe: The courſe I throw the arable into, is 1. carrots; 2. barley, 3. clover; 4. wheat; which is beyond doubt for light lands an incomparable good one.

Stock.				*l.*	*s.*	*d.*
Rent, &c. as in the laſt farm,				138	12	0
Live ſtock, ditto,	-	-		512	0	0
Implements, ditto,	-	-		72	13	0

Seed and tillage.

On 25 acres of wheat as before,	-	£.	34	7	6	
Ditto on 25 of ſpring-corn,			30	0	0	
Seed for 25 acres of carrots,	-	-	7	10	0	
						71 17 0

Labour.

One earth on 25 acres of wheat, -	£.	1	5	0	
Sowing, - -		0	6	3	
Harrowing, -		0	5	0	
Water-furrowing, -		1	5	0	
Weeding, -		1	5	0	
Reaping and harveſting,		7	10	0	
Thraſhing, 3 qrs. *per* acre, 75 qrs. at 2*s.* -		7	10	0	
Carrying out 8 journeys,		0	16	0	
Labour as before on 25 acres of ſpring corn,		16	8	9	
One earth on 25 acres of carrot land, trench ploughed with 4 horſes, 3 men half an acre a day, - -		7	10	0	
Sowing, - -		1	5	0	
Carry over,	£.	45	6	0	795 2 6

Harrowing,

Brought over,	£. 45	6	0	795	2	6
Harrowing, -	0	6	3			
Hand hoeing, at 3 *l.*	75	0	0			
Digging up, -	25	0	0			
Carting home, at 5 *s.*	6	5	0			
Mowing, making, &c. 10 acres of graſs, -	4	0	0			
Chopping, &c. &c. 25 acres of ſtubble, -	3	15	0			
Labour on ditching, carting, and re-carting, as before, -	37	16	0			
Carting faggots, -	0	4	0			
Cutting chaff, -	0	12	6			
Sundry ſmall articles,	6	0	0			
	204	4	9			
27 *per cent.*. -	55	1	0			
				259	5	9
Sundry articles.						
The ſame as in laſt farm, -				85	0	0
				£. 1139	8	3

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - - -	138	12	0
70 Beaſts - -	350	0	0
Seed for 25 acres of wheat, 25 of ſpring corn, 25 of clover, and 25 of carrots, - -	37	10	0
Labour, - -	259	5	9
Sundry articles as before, -	45	0	0
	£. 830	7	9

Produce.	*l.*	*s.*	*d.*
25 Acres of wheat, 87½ qrs. at 40*s.*	175	0	0
25 Acres of barley and oats, 125 qrs. deduct 36 oats, 89 at 16*s.*	71	4	0
70 Beaſts, - - -	630	0	0
20 Cows, - -	100	0	0
	976	4	0
Expences, - -	830	7	9
	145	16	3
Intereſt, - - - -	56	19	0
Profit, - - - -	£. 88	17	3

The capital pays, 12*l.* 11*s.*; a profit not equal to the expence of the culture which is ſo great as to deduct much from the benefit of the practice: I have elſewhere remarked, that carrots are cultivated to prodigious profit in the neighbourhood of Woodbridge in Suffolk, where three hoeings are executed for 15*s.* and the crop drawn for much leſs than I have ſuppoſed; but I mean to extend theſe eſtimates to all light ſoils, though not ſands; and upon loams the hoeing and diggings muſt be more expenſive than on a looſe ſandy ſoil. I ſhall, in the next place, preſent a calculation of the carrot culture in a courſe, under the ſuppoſition of the work being done much cheaper, though not quite ſo low, as where it has been ſo long eſtabliſhed.

N° 8.

N° 8.

Variation the ſeventh.

One hundred and ten acres, the ſoil light, cultivated with carrots, in a courſe, at a lower expence.

Stock.				*l.*	*s.*	*d.*
Rent, &c. as before,	-			138	12	0
Live ſtock, ditto,	-	-		512	0	0
Implements, ditto,	-			72	13	6
Seed and tillage, ditto,		-		71	17	6
Labour on the corn, ditto, - -	£. 36	11	0			
Ditto labour on hay, ſtubble, manure, &c. &c. &c. - -	52	7	6			
Ploughing carrot land as before, -	7	10	0			
Sowing, - -	0	12	6			
Harrowing, -	0	6	3			
Hand-hoeing at 20*s.*	25	0	0			
Digging at 10*s.*	12	10	0			
Carting home, -	6	5	0			
	141	2	3			
27 *per cent.* -	38	1	0			
				179	3	3
Sundry articles, as before,				85	0	0
			£.	1059	6	3

ANNUAL ACCOUNT.

Expences.	*l.*	*s.*	*d.*
Rent, &c. - -	138	12	0
70 Beaſts, - - -	350	0	0
Seed, - - -	37	10	0
Labour, - - -	179	3	3
Sundries, - - -	45	0	0
£.	750	5	3

Produce.	*l.*	*s.*	*d.*
The ſame as before, - -	976	4	0
Expences, - -	750	5	3
	225	18	9
Intereſt, - - -	52	19	0
Profit, - - - £.	172	19	9

The capital pays 21 *l.* 6 *s. per cent.* which great profit is a proof that carrots, not appearing in the preceding calculation ſo advantageous as cabbages, has not been owing to any deficiency in the value of the crop, but to the height of the expences at which I am obliged to eſtimate the labour, and to theſe high prices I muſt adhere, or my readers not accuſtomed to the culture would often find their profit much leſs than I ſhould ſtate.

GENERAL

GENERAL RECAPITULATION.

OF THIS CHAPTER.

Stock requiſite for the preceding farms.

N° 1. One hundred and ſeventy acres arable; the ſoil clay or loam, - -	£.	865	13 11
Ditto a gentleman, -	£.	918	13 11
2. One hundred and ten acres all arable, the ſoil light enough for turnips, -	£.	887	11 6
Ditto a gentleman, -	£.	928	8 6
3. One hundred and twenty acres, all graſs, - -	£.	835	5 0
Ditto a gentleman, -	£.	852	7 0
4. One hundred and ten acres, the ſoil clay or loam, laid down to graſs, -	£.	1045	7 9
Ditto a gentleman, -	£.	1141	17 9
5. Fifty-three acres all arable, the ſoil all light, or part light and part ſtiff, cultivated in carrots and lucerne,	£.	1128	3 0
6. One hundred and ten acres arable, the ſoil clay, cultivated on improved principles, cabbages in a courſe,	£.	1031	4 0
7. One hundred and ten acres arable, the ſoil light, cultivated on improved principles, carrots in a courſe,	£.	1139	8 3
8. One hundred and ten acres ar ble, the ſoil light, cultivated on improved principles: carrots in a courſe at a leſs expence than N° 7.	£.	1059	5 9

Annual

Annual produce of theſe farms, expences paid.

N° 1.	-	£.	185	0 7
Ditto a gentleman,		£.	132	0 7
2.	- -	£.	135	16 3
Ditto a gentleman,		£.	93	17 3
3.	- -	£.	182	15 0
Ditto a gentleman,		£.	165	13 0
4.	- -	£.	190	0 0
Ditto a gentleman,		£.	175	14 0
5.	- -	£.	120	3 0
6.	- -	£.	159	3 6
7.	- -	£.	145	16 3
8.	- -	£.	225	18 9

Profit per cent. on theſe farms.

N° 1.	- -	£.	21	7 0
Ditto a gentleman,	-	£.	14	7 0
2.	- -	£.	15	6 0
Ditto a gentleman,	-	£.	10	2 0
3.	- -	£.	20	14 0
Ditto a gentleman,	-	£.	19	9 0
4.	- -	£.	18	1 0
Ditto a gentleman,	-	£.	15	9 0
5.	- - -	£.	10	12 0
6.	- -	£.	15	8 0
7.	- - -	£.	12	11 0
8.	- - -	£.	21	6 0

Compariſon

Compariſon between the gentlemen and farmers, in the profit per cent. on theſe farms.

	l.	s.	d.
N° 1. The farmer, -	21	7	0
The gentleman, - -	14	7	0
Superiority of the former, -	£. 7	0	0
2. The farmer, - -	15	6	0
The gentleman, - -	10	2	0
Superiority of the former, -	£. 5	4	0
3. The farmer, - -	20	14	0
The gentleman, -	19	9	0
Superiority of the former, -	£. 1	5	0
4. The farmer, - -	18	1	0
The gentleman, -	15	9	0
Superiority of the former, -	£. 2	12	0

Progreſſion of the farmer's profit in the above farms.

N° 1. - -	£. 21	7	0
3. - - -	£. 20	14	0
4. - -	£. 18	1	0
2. - - -	£. 15	6	0

Pro-

Progreſſion of the gentleman's profit in the above farms.

N° 8.	- -	£. 21	6 0
3.	- - -	£. 19	9 0
4.	- - -	£. 15	9 0
6.	- - -	£. 15	8 0
1.	- -	£. 14	7 0
7.	- -	£. 12	11 0
5.	- - -	£. 10	12 0
2.	- -	£. 10	2 0

Theſe general ſtates of the account require a few obſervations to render them of practical uſe to the reader. Firſt, reſpecting the common farmer.

His greateſt profit is from the clay arable farm, which pays him ſo conſiderably as 21 *l.* 7 *s. per cent.* Arable farms, with infinite attention and good conduct, are certainly very profitable, and the common farmer certainly gives the firſt, and may eaſily be ſuppoſed to poſſeſs the latter.

The next profitable farm is the graſs one: ſuch are vaſtly beneficial to whoever cultivates them; and, as I have often obſerved, are liable to fewer loſſes and evil chances than any. There are certain proportions which render ſome arable farms more advantageous than graſs ones, but in the general, the latter will prove moſt ſo, and will in every account rank very high in the ſcale of profit.

The next in order is that laid down to graſs, which, like thoſe already in graſs, are highly profitable, and pay better than many arable ones.

The next and laſt is the arable farm on a ſoil light enough for turnips; which, under ſome circum-

circumſtances and proportions, is more profitable on clay farms, but in others, leſs variations in different ſized farms ariſe from varied proportions. If a man has a thouſand pounds to diſpoſe of, it may be moſt profitable to expend it upon a clay ſoil; if he has twice that ſum, it may be better on a light one, and *vice verſa*. Nothing is therefore ſo deceitful, in ſuch affairs as theſe, as reaſoning by analogy: A clay farm of 100 acres is not ſo beneficial as a light loamy one: why ſhould not the rule hold good with five times the land, conducted on the ſame principles? This queſtion may doubtleſs be aſked with ſome appearance of reaſon; and to reply only in generals cannot be anſwered; but minute every particular, and variations will inſenſibly appear, which alter the proportions perhaps of every article.

In the gentleman's ſcale of farms, the firſt is that conducted on improved principles; carrots in a courſe, but cultivated at a leſs expence than the prices I generally minute, though not ſo low as in countries where they are commonly cultivated. The profit is 21 *l.* 6 *s.* *per cent.* notwithſtanding the whole labour is increaſed as uſual 27 *per cent.* This farm ſhews the importance of gentlemen procuring their work to be done at low prices, for in the other carrot farm, which is farmed in every reſpect in the ſame manner, and differs only in the price of labour, the profit *per cent.* is but 12 *l.* 11 *s.* A riſe of theſe prices is attended with ſo great conſequences, that too much attention cannot be given to it. The carrot culture in a courſe for light ſoils is evidently a moſt beneficial one where the labour can be performed at moderate prices. This part of the calculation muſt therefore be variable according to circumſtances, like every other in theſe ſheets: for

for no one can ſuppoſe every variation to be minuted here. I might give a complete eſtimate of each farm varied to every price of every article of labour, and to every article of produce in varied quantity and price; but ſuch a work would be ſo voluminous, that 20 folios would be requiſite for an index to it.—Without ſplitting ſuch hair-breadths, we may be allowed to pronounce that the carrot is an excellent vegetable for the field culture, and the moſt profitable to introduce in a courſe, of any, for light ſoils.

Next to this carrot farm comes the graſs one: ſuch will ever be particularly high in the gentleman's account. This farm is only 25 *s. per cent.* below the farmer's in profit: Graſs, with proper management, (poſſeſſing the requiſite ſum to ſtock) requires ſcarce any *labour*, which is the gentleman's weak part, conſequently he ſhould always take ſpecial care to direct his attempts in that field where he is ſtrongeſt. In arable farms, even when cultivated on improved principles, there are a thouſand nameleſs deductions to be made in points where the gentleman cannot poſſeſs the farmer's advantages, particularly the culture of corn; in every thing concerning which, he is ſo open to be cheated, deceived, buying and ſelling to diſadvantage, &c. &c. &c. that all farms in which corn is an article of conſequence, muſt, more or leſs, be on that account diſadvantageous.

In the above carrot farm a profit appears of above 20 *per cent.* but half that farm is every year under corn; which circumſtance at once ſhould remind the reader of thoſe diſadvantages which I have ſo often mentioned, but which cannot be reduced to eſtimate: Hence a graſs farm that leaves 15 *per cent.* on the foot of its account may eaſily be more advantageous *to a gentle-*

gentleman, than an arable one that appears to yield 20.

The third farm in this table is that laid down to graſs: a freſh proof of the profit of theſe farms; and ſhews, that if a gentleman does not chuſe to occupy an arable one, it will anſwer greatly to him to hire one with a view of converting it into a graſs one

The fourth is that wherein cabbages are introduced in a courſe every fourth year: This, although an arable one, and conſequently liable to many objections, is an excellent culture for a gentleman, particularly in the crop of cabbages (the fourth of the farm) being in many caſes convertible into the ſame produce as the clover, ſtraw, hay, &c. &c. that is, into the ſame cattle; which, for numerous reaſons, is a point of much importance to a gentleman. If cabbages are not cultivated upon this farm, beans muſt be ſubſtituted; which, beſides the inferiority viſible in the above table, has all the diſadvantages attending corn crops, in themſelves ſo prejudicial to gentlemen. There is, for this reaſon, a much greater difference between a farm in which cabbages are one crop, and another in which beans are one, than apparent in theſe accounts. Nor is it poſſible in ſuch eſtimates to reduce every thing to calculation: I rather ſtrained a point in calculating the difference between a gentleman and farmer in labour at 27 *per cent.* I might have done the ſame in that of being cheated in the *minutiæ* of the buſineſs—of paying artizans too much—of buying and ſelling to diſadvantage—of having bad crops through want of judgment; but ſo many ideal eſtimates would, in the eyes of ſome, have carried too fictitious an appearance: for this reaſon I confined myſelf to that point the leaſt

leaſt ſuppoſititious; and took care in that to keep within bounds.

The fifth in the ſcale is the clay arable.

The ſixth the light ſoil arable farm, cultivated upon improved principles, carrots in a courſe.

The ſeventh, carrots and lucerne.

The eighth, the light ſoil farm.

The inferiority of carrots and lucerne, in this view, proves nothing againſt thoſe vegetables in other variations: There can be no doubt but a farm cultivated merely for raiſing food for cattle, muſt, to a gentleman, be more profitable than moſt common ones; but in this the winter vegetable is carrots, under the diſadvantages of the expenſive culture I before mentioned, and probably the ſcale of this farm will hereafter be found too ſmall for this management.

END of the FIRST VOLUME.